



For Meeting of: June 4, 2013

To: City Council

From: Kevin Caldwell, Community Development Director 

Through:  Jim Stretch, City Manager

Date: May 28, 2013, 2012

Subject: Circulation Element; General Plan Amendment

Recommendation:

That the City Council:

1. Receive staff's report regarding the proposed Circulation Element;
2. Open the public hearing, receive public input, discuss the Draft Circulation Element and continue consideration of the Draft Circulation Element to your meeting of June 18, 2013;

Background and Discussion

Attachment 1 is the Draft Circulation Element for the City. The current Circulation Element (Attachment 2) was adopted in 1977, some 33 years ago. The Circulation Element is one of seven mandated elements of the General Plan. The other mandated elements include Land Use (2008), Housing (2010), Conservation (2001), Open Space (1972), Safety (1975) and Noise (2012).

In 2010 the Governor's Office of Planning and Research (OPR), published the *Update to the General Plan Guidelines: Complete Streets and the Circulation Element*. Assembly Bill 1358 (AB 1358, Chapter 657, Statutes of 2008), the California Complete Streets Act, required OPR to amend the 2003 *General Plan Guidelines* to provide guidance to local jurisdictions on

how to plan for multimodal (automobile, public transit, bicycle and pedestrian) transportation networks in general plan circulation elements. Staff considered and addressed the changes in preparing the Draft Circulation Element.

The Circulation Element identifies the guiding principles for moving people and goods within the City and identifies the infrastructure necessary to assure that the transportation network will serve the City at General Plan build-out.

A majority of trips are made by automobile. The Circulation Element identifies the roadway system necessary for automobile traffic by setting levels of service, hierarchy of roads, and areas where road improvements are necessary.

The Circulation Element also identifies alternative travel modes, such as walking, bicycles, bus transit, and rail transit. The alternative transportation is important to reduce pressure on roads, conserve energy, and improve the public health through exercise.

The road system provides many functions in addition to carrying vehicle traffic. It provides open space separating dwelling units and commercial uses. If properly landscaped, streetside landscaping provides location for trees to support the urban forest. If developed with safe pedestrian and bike ways, it serves as a non-motorized transportation corridor, a linear park, and an attractive network for healthy exercise. If properly designed, it provides the background for the community urban design and appearance. Finally, it provides the right of way for most of the City's public utilities infrastructure.

As the Council is aware the City Traffic Committee met in March and discussed the one-way concept for First and Second Avenues. The one-way concept was initially brought up due to concerns regarding emergency access. Based on discussions, the Traffic Committee believes the one-way concept may not in fact improve access for emergency vehicles. However, the Traffic Committee did recommend that a number of intersections be striped and signed to restrict parking in certain areas. The Traffic Committee believes restricting parking in these key areas will improve access for emergency vehicles.

The Traffic committee also discussed potential changes to the southbound Highway off-ramp at Wildwood Avenue at the north end of town and changes to the intersection of Scenic Drive and

Eeloa Avenue. Please see Attachment 3. Accordingly, staff has included Implementation Measures CE 1-2.c and CE 1-2.d.

Below are the recommended Goals, Policies and Implementation Measures included in the Draft Circulation Element:

5.0 GOALS, POLICIES, AND PROGRAMS

The Circulation Element proposes several goals and policies to support important roadway functions, including pedestrian and bicycle modes of transportation, rather than serving the single purpose of automobile traffic.

Goal CE 1

Develop and maintain a safe, balanced vehicular and non-vehicular transportation system to meet the mobility needs consistent with General Plan land use goals and policies.

Policy CE 1-1

Develop and maintain the Circulation Plan network of arterials, collectors, and local streets as identified in Figure 4-1 of the Circulation Element. The existing and proposed streets should be maintained and designed to serve the functions they are intended to serve, with adequate capacity and safety.

Implementation CE 1-1.a. Design, construct, upgrade, and maintain the automobile, bicycle and pedestrian circulation system according to the functions they are intended to serve.

Responsibility:	Project proponents, Community Development, Public Works and the City Engineer.
Timeframe:	Ongoing.
Resources:	Capital Improvement Program, project proponents, street funds, general obligation bonds, potential improvement districts and impact fees.

Implementation CE 1-1.b. Coordinate with the County, CALTRANS and the Humboldt County Association of Governments (HCAOG) in addressing regional transportation issues.

Responsibility: Community Development, Public Works and the City Engineer.
Timeframe: Ongoing.
Resources: Local, State and Federal programs.

Implementation CE 1-1.c. Explore the potential of designating one-way streets on narrow, crowded (parked vehicles) streets to enhance traffic flow and emergency access.

Responsibility: Community Development, Public Works, City Engineer and the Traffic Committee.
Timeframe: Ongoing.
Resources: Capital Improvement Program, General Fund and street funds.

Policy CE 1-2

Design street systems in residential areas to minimize through traffic, to encourage internal movement by bicycling and walking, to provide safer and quieter neighborhoods, to minimize vehicular conflicts at intersections and to ensure that the impact of recreational traffic on local residents is minimized.

Implementation CE 1-2.a. Discourage driveway encroachments on arterial and collector streets.

Responsibility: Community Development, Public Works and the City Engineer.
Timeframe: Ongoing.
Resources: Project proponents.

Implementation CE 1-2.b. Identify and provide directional signs to recreational uses that maximize use of arterial and collector streets and minimize or eliminate traffic through residential areas.

Responsibility: Community Development, Public Works and the City Engineer.
Timeframe: Ongoing.

Resources: General Fund, Capital Improvement Program and street funds.

Implementation CE 1-2.c. In order to improve visibility and reduce the number of vehicles that run the stop sign, encourage Caltrans to redesign the Highway 101 southbound off-ramp at Wildwood Avenue to provide for a perpendicular intersection with Wildwood Avenue.

Responsibility: Caltrans, Public Works and the City Engineer.

Timeframe: Ongoing.

Resources: State funding, including grant funding.

Implementation CE 1-2.d. Improve the intersection of Scenic Way and Eeloa Avenue to enhance vehicular, pedestrian and bicycle safety.

Responsibility: Public Works and the City Engineer.

Timeframe: Ongoing.

Resources: Capital Improvement Program, General Fund and street funds State funding, including grant funding.

Goal CE 2

Maintain a satisfactory Level of Service (LOS) for automobile traffic.

Policy CE 2-1

Maintain minimum traffic Level of Service (LOS) C.

Implementation CE 2-1. Evaluate traffic impacts of major developments for consistency with LOS standards.

Responsibility: Community Development, Public Works and the City Engineer.

Timeframe: Ongoing. Require traffic reports with major development proposals.

Resources: Project Proponents.

Goal CE 3

Maintain and enhance river access and encourage bicycle use and walking as an alternative to automobile traffic and for community health and enjoyment throughout the community.

Policy CE 3-1

Provide an extensive network of pedestrian, including the physically disabled and bicycle pathways to support community health and provide safe alternatives to automobile use.

Implementation CE 3-1.a. Require project proponents to design and construct facilities for bicycle and pedestrian routes as identified in the Circulation Element.

Responsibility: Community Development, Public Works and the City Engineer.
Timeframe: Ongoing. Require traffic reports with major development proposals.
Resources: Project Proponents.

Implementation CE 3-1.b. Acquire fee title or easements to provide for the construction of bicycle and pedestrian routes as identified in the Circulation Element.

Responsibility: Community Development, Public Works and the City Engineer.
Timeframe: Ongoing
Resources: General Fund, Capital Improvement Program, project proponents, street funds and grants.

Implementation CE 3-1.c. Integrate bicycle and pedestrian routes with transit stops.

Responsibility: Community Development, Public Works and the City Engineer.
Timeframe: Ongoing
Resources: Include integration with public works projects and planning permit approvals.

Implementation CE 3-1.d. Explore establishing a rail with trail corridor along the existing railroad along the Scotia Bluffs.

Responsibility: Community Development, Public Works and the City Engineer.
Timeframe: Ongoing
Resources: Grant funds.

Policy CE 3-2

Provide continuous sidewalks along all streets. Maintain sidewalks in good repair.

Implementation CE 3-2.a. Explore a program to fund sidewalk improvement or installation where no sidewalks exist, including sharing of costs with property owners, loans payable at time of sale, etc.

Responsibility: Community Development, Public Works and the City Engineer.
Timeframe: Ongoing
Resources: General Fund, Capital Improvement Program, project proponents, street funds, property owners and grants.

Implementation CE 3-2.b. Identify major pedestrian routes and, where they adjoin streets, prepare roadway sections that encourage pedestrian use.

Responsibility: Community Development, Public Works and the City Engineer.
Timeframe: Prior to major street improvements
Resources: General Fund. Repair and install with public works projects and planning permit approvals.

Implementation CE 3-2.c. Repair or install sidewalks on all streets in conjunction with public works and private development projects.

Responsibility: Community Development, Public Works and the City Engineer.
Timeframe: Ongoing, public works projects and planning permit approvals
Resources: General Fund, Capital Improvement Program, project proponents, street funds, property owners and grants.

Implementation CE 3-2.d. Where possible, use traditional sidewalk design with a planter strip between the curb and sidewalk,

Responsibility: Community Development, Public Works and the City Engineer.
Timeframe: Ongoing, with public works projects and planning permit approvals
Resources: Development approvals.

Policy CE 3-3

Provide trees and/or landscaping along streets and pedestrian routes. Where street widening would remove trees and/or landscaping, investigate alternative roadway configurations that would preserve the trees and/or landscaping.

Implementation CE 3-3.a. Review proposed projects, including public works projects that may impact existing trees and/or landscaping

Responsibility: Community Development, Public Works and the City Engineer.
Timeframe: Ongoing
Resources: Development approvals, grant funds.

Policy CE 3-4

Maintain, enhance and reestablish historic river access points and develop trails and staging areas to encourage access to the river.

Implementation CE 3-4.a. Review proposed projects, including public works projects that may impact existing or potential trails and/or staging areas as identified in Figure 4-2 of the Circulation Element and require dedications and improvements as part of project approvals.

Responsibility: Community Development, Public Works and the City Engineer.
Timeframe: Ongoing
Resources: Project proponents.

Implementation CE 3-4.b. Utilize City funds where appropriate and pursue grant funding for the establishment, reestablishment, maintenance and enhancement of existing or potential trails and/or staging areas as identified in Figure 4-2 of the Circulation Element.

Responsibility: Community Development, Public Works and the City Engineer.
Timeframe: Ongoing
Resources: General Fund, Capital Improvement Program, street funds, property owners and grants

Goal CE 4

Promote public transit service to, from and within the City.

Policy CE 4-1

Participate in efforts to maintain and enhance public transit opportunities within the City.

Implementation CE 4-1.a. Maintain and encourage use of public transit by encouraging providers to maintain and expand schedules that serve the community.

Responsibility: Humboldt Transit Authority (HTA), the Humboldt County Association of Governments (HCAOG), CALTRANS, Community Development, Public Works and the City Engineer.
Timeframe: Ongoing.
Resources: Local, State and Federal transit funding.

Implementation CE 4-1.b. Provide convenient bus stop locations and shelters.

Responsibility: Humboldt Transit Authority (HTA) and the Humboldt County Association of Governments (HCAOG), CALTRANS, Community Development, Public Works and the City Engineer.
Timeframe: Ongoing.
Resources: Local, State and Federal transit funding.

Goal CE 5

Promote and support re-establishing regional rail service in and out of the County.

Policy CE 5-1

The City supports re-establishing regional rail service, including cargo/freight and tourists excursions in and out of the County.

Implementation CE 5-1.a. Encourage re-establishing regional rail service in and out of the County.

Responsibility: North West Pacific Railroad (NWPR), Northern Counties Logging Interpretative Association, (NCLIA) the Humboldt County Association of Governments (HCAOG), CALTRANS, Community Development, Public Works and the City Engineer.

Timeframe: Ongoing.

Resources: Public/Private Partnerships, Local, State and Federal transit funding.

Goal CE 6

Promote and support the establishment of an Off Highway Vehicle (OHV) Park for City and County residents and visitors.

Policy CE 6-1

The City supports the establishment of an Off Highway Vehicle (OHV) Park.

Implementation CE 6-1.a. Support the establishment of an Off Highway Vehicle (OHV) Park.

Responsibility: California State Parks, Division of Off Highway Motor Vehicle Recreation, County of Humboldt, City of Rio Dell.

Timeframe: Ongoing.

Resources: Grant funding, including Green Sticker Funds, Public/Private Partnerships

Procedures for Plan Amendments

California Government Code § 65350-65362 contains the following procedural requirements to amend a general plan:

- Prior to action to amend a general plan, the proposed action should be referred to and circulated for 45 days to: the City, County, school districts, LAFCo, regional planning agencies, any federal or state agencies, water providers, and Native American tribes with traditional lands located within the City;
- The Planning Commission shall hold at least one public hearing before approving a recommendation on the amendment;
- The Planning Commission shall make a written recommendation on the amendment;
- Prior to amending the general plan, the City Council shall hold at least one public hearing;
- The City Council shall amend the general plan by resolution, which shall be adopted by not less than a majority of the legislative body;
- City Council may approve, modify, or disapprove the Planning Commission recommendations, however any substantial modifications not previously considered by the Planning Commission shall first be referred to the Planning Commission for its recommendation;
- Copies of the adopted general plan amendment shall be made available for inspection by the public one working day following adoption;
- Within two working days after a request, copies shall be furnished to those so requesting;
- Any specific plan or other plan of the City that is applicable to the same areas or matters affected by a general plan amendment shall be reviewed and amended as necessary to make the specific or other plan consistent with the General Plan;

Plan Amendment Required Findings:

1. The proposed amendment(s) are deemed to be in the public interest.

The State has determined that the preparation and adoption of a Circulation Element is in the public interest in that it identifies the guiding principles for moving people and goods within the City and identifies the infrastructure necessary to assure that the transportation network will serve the City at General Plan build-out.

2. The proposed amendments are consistent and compatible with the rest of the General Plan and any implementation programs that may be affected.

Section 1.4 of the Land Use Element of the General Plan includes a policy, P1.4-2 that requires the preparation of "...additional General Plan Elements to refine and improve the Plan." In addition, Section 1.5 of the Land Use Element of the General Plan calls for the preparation and adoption of a Circulation Element. Therefore, the proposed General Plan Amendment (Circulation Element) is consistent with the General Plan.

3. The proposed amendments have been processed in accordance with the applicable provisions of the California Government Code and the California Environmental Quality Act (CEQA).

State law requires that any amendment of a general plan comply with the California Environmental Quality Act (CEQA). The primary purpose of CEQA is to inform the decision makers and the public of potential environmental effects of a proposed project. The Circulation Element itself will not result in any potential environmental effects. The Circulation Element does not include any new roads or road networks within the City. The City currently imposes conditions of approval, including road improvements, sidewalks, trails etc. on development projects. Any potential environmental impacts associated with the development of new roads, sidewalks and trails are evaluated at the time of application. As such, staff believes Based on the nature of the project, staff has determined that the project is Statutorily Exempt pursuant to Section 15061(b) (3) of the CEQA Guidelines, Title 14, Chapter 3 of the California Code of Regulations. Pursuant to Section 15061(b) (3) of the CEQA Guidelines this exemption is covered by the general rule that CEQA applies only to projects which have the potential for

causing a ***significant*** effect on the environment. Where it can be seen with certainty that there is no possibility that the project in question may have a significant effect on the environment, the project is not subject to CEQA. Based on the nature of the proposed amendment and the discussion above, staff believes there is no evidence to suggest that the amendment will have a significant effect on the environment.

Attachments

Attachment 1: Draft Circulation Element;

Attachment 2: Existing 1977 Circulation Element;

Attachment 3: Possible improvements to the Highway 101 southbound off-ramp at Wildwood Avenue and the intersection of Scenic Way and Eeloa Avenue.

Chapter 4 Circulation Element

4.1 INTRODUCTION



The Circulation Element identifies the guiding principles for moving people and goods within the City and identifies the infrastructure necessary to assure that the transportation network will serve the City at General Plan buildout.

A majority of trips are made by automobile. The Circulation Element identifies the roadway system necessary for automobile traffic by setting levels of service, hierarchy of roads, and areas where road improvements are necessary.

On September 30, 2008 Governor Arnold Schwarzenegger signed Assembly Bill 1358, the California Complete Streets Act. The Act states: "In order to fulfill the commitment to reduce greenhouse gas emissions, make the most efficient use of urban land and transportation infrastructure, and improve public health by encouraging physical activity, transportation planners must find innovative ways to reduce vehicle miles traveled (VMT) and to shift from short trips in the automobile to biking, walking and use of public transit.

The legislation impacts local general plans by adding the following language to Government Code Section 65302(b)(2)(A) and (B):

(A) Commencing January 1, 2011, upon any substantial revision of the circulation element, the legislative body shall modify the circulation element to plan for a balanced, multimodal transportation network that meets the needs of all users of the streets, roads, and highways for safe and convenient travel in a manner that is suitable to the rural, suburban, or urban context of the general plan.

(B) For the purposes of this paragraph, "users of streets, roads, and highways" means bicyclists, children, persons with disabilities, motorists, movers of commercial goods, pedestrians, users of public transportation, and seniors.

The Circulation Element also identifies alternative travel modes, such as walking, bicycles, bus transit, and rail transit. The alternative transportation is important to reduce pressure on roads, conserve energy, and improve the public health through exercise.

The road system provides many functions in addition to carrying vehicle traffic. It provides open space separating dwelling units and commercial uses. If properly landscaped, streetside landscaping provides location for trees to support the urban forest. If developed with safe pedestrian and bike ways, it serves as a non-motorized transportation corridor, a linear park, and an attractive network for healthy exercise. If properly designed, it provides the background for the community urban design and appearance. Finally, it provides the right of way for most of

the City's public utilities infrastructure.

4.2 RELATIONSHIP TO OTHER ELEMENTS

The goals and policies in this Element are directly correlated with that of the Land Use Element and Housing Element so that new and existing development will be adequately served by the transportation system, and will not interfere with existing or planned improvements.

**Mandatory
General Plan
Elements**

Coordinating land use and circulation decisions is necessary to achieve many of the goals of this Plan. For example, adequate roads and safe bicycle and pedestrian routes within the City are essential to accommodate growth. If circulation problems are fixed and improvements are made as development occurs, growth can be accommodated without creating traffic and traffic safety problems for existing residents. Land use planning must also complement transportation planning by locating uses in areas that can be cost effectively served and conditioning projects to mitigate impacts.

**Land Use
Circulation
Housing
Conservation
Open Space
Safety
Noise**

4.3 AGENCY COORDINATION

Coordinating the City's efforts with the California Department of Transportation (Caltrans), and the regional Humboldt County Association of Governments (HCAOG) is a high priority of this Plan.



The Humboldt County Association of Governments (HCAOG) is a Joint Powers Agency comprised of the seven incorporated cities (Arcata, Blue Lake, Eureka, Ferndale, Fortuna, Rio Dell, Trinidad), and the County of Humboldt. It is the designated Regional Transportation Planning Agency (RTPA). HCAOG is largely responsible for programming State highway, local street and road improvements, public transportation resources, and the roadside call box program. HCAOG also bears responsibility for preparing and implementing the Regional Transportation Plan (RTP) and the Regional Trails Master Plan.

The Regional Transportation Plan (RTP) is a long-range transportation planning document for Humboldt County. HCAOG prepares updates every five years, coordinating with the California Department of Transportation (Caltrans) District 1, local governments, local tribes, local transit authorities and transportation agencies, residents, and other stakeholders. HCAOG is currently in the process of updating the 2008 RTP, as well as the plan's Environmental Impact Report (required by the California Environmental Quality Act).

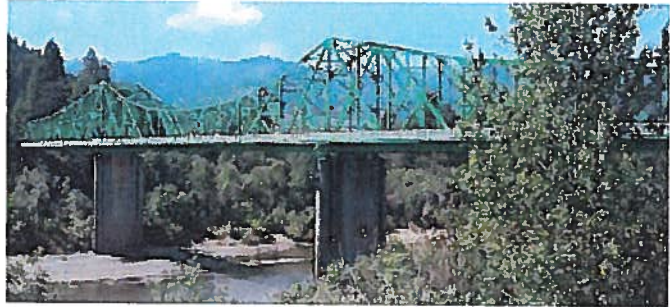
The main purpose of the County Regional Trails Master Plan is to promote the development of a regional active transportation system. The plan promotes active transportation connections *within* and *between* communities.

The Humboldt County Regional Trails Master Plan is a long-range coordinating and resource document that will help plan and implement a regional, active transportation system that ensures safe and equitable access for non-motorized users. The plan compiles information on

existing trails and active transportation planning in the region, focusing primarily on off-street trails.

4.4 ROADWAY INFRASTRUCTURE

Access to the City is primarily from US Highway 101. There are three access points into the City: (1) the Wildwood Avenue interchange on the north end of the City; (2) the Davis Street interchange; and (3) the Scotia – Rio Dell interchange to the south. The Scotia – Rio Dell bridge, also known as the Eagle Prairie Bridge (State Route 283), is the shortest state highway in the Country at .36 of a mile.



The City currently maintains approximately 14.2 miles of streets. The vast majority of streets are made up primarily of two-lane roads. There are a number of streets within the City that do not have curbs, gutters and sidewalks. The lack of curbs, gutters and sidewalks contributes to drainage problems in many of the City's neighborhoods.

A functional classification system provides for specialization in meeting the access and mobility requirements of the development permitted under the General Plan. Local streets emphasize property access; arterials emphasize high mobility for through traffic; and collectors seek a balance between the two functions.

Figure 4-1, the Circulation Diagram, presents the official functional classifications of existing and proposed streets, roadways, and highways in Rio Dell. The hierarchy of the functional classifications in the city consists of principal arterials, minor arterials, collectors, and local roads and streets as described below. The Circulation Diagram identifies the arterial and collector roadway system in Rio Dell. All roadways not identified on the Circulation Diagram are classified as local streets.

Freeways: Freeways route traffic through the community and are characterized by large traffic volumes and high speed travel.

Arterial Routes: Arterials link residential and commercial districts, and serve shorter through traffic needs.

Collector Roads: Collector streets link neighborhoods to arterials and are not intended for through traffic, but are nonetheless intended to move traffic in an efficient manner.

Local Streets: Local streets are designed to serve only adjacent land uses and are intended to protect residents from through traffic impacts.

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FIGURE 4-1
CIRCULATION DIAGRAM**

Roadway functional classifications and standards for Arterial Routes, Collector Roads and Local Streets are shown below in Table 4-1. The standards identify recommended right-of-way, sidewalk, planting strip, parking, bicycle and travel lane widths. These are only recommended widths. The primary objective of the recommended widths is to ensure the safe and efficient movement of motor vehicles, bicycles and pedestrians. If a development project does not incorporate the recommended widths, appropriate Caltrans or American Association of State Highway and Transportation Officials (AASHTO) standards shall be applied. Design features not addressed by Caltrans and AASHTO standards shall be designed consistent with standard engineering practices.

**Table 4-1
Recommended Right of Way/Street Widths**

Type	ROW	Sidewalk	Landscape Strip	Parking Lane	Bike Lane	Travel Lane	Median
Principal Arterial	96	6	10	0	5	12	15
Minor Arterial	82	6	10	8	5	12	0
Principal Collector	82	6	6	0	5	12	12
Minor Collector	74	6	6	8	5	12	0
Local up to 300 parcels	72	5	6	8	5	12	0
Local up to 75 parcels	56	5	3	8	5	10	0
Local up to 25 parcels	44	5	0	8	0	9	0
Local up to 6 parcels	40	5	0	7	0	8	0

4.5 ROADWAY CAPACITY

As the City's population grows, corresponding increases in vehicle volumes will have impacts on the safety and functionality of City roadways. Roadway capacity is generally assessed using a Level of Service (LOS) rating. The LOS rating is a qualitative measure describing operational conditions within a traffic stream and their perception by motorists. The quality of traffic operations is expressed in terms of LOS A (no congestion) through LOS F (extreme congestions). LOS definitions generally describe traffic conditions in terms of speed, travel time, freedom to maneuver, traffic interruption, comfort, and convenience. Typically, level of service D is used as the design standard in urban areas and level of service C is used as the design standard in rural areas. Table 4-2 identifies the descriptions of the various LOS levels.

**Table 4-2
Level of Service (LOS) Standards**

LOS	Description
A	Free-flowing conditions with no delay
B	Free-flowing conditions; however, speed and maneuverability are slightly restricted due to the presence of other vehicles
C	Stable traffic flow, with less freedom to select speed, change lanes, or pass. Some delay may be experienced
D	A traffic stream approaching unstable flow, with reduced speed and maneuverability.
E	Unstable traffic flow with rapidly fluctuating speeds and flow rates
F	Forced traffic flow, where speed and flow may drop to zero with high densities.

Overall roadway capacity and functionality in the City is currently operating at a LOS C or better level.

Due to their right-of-way widths and the amount of on-street parking on First and Second Avenues, the City Council has discussed the possibility of designating these streets as one-way streets. The purpose of designating the streets one-way is to improve traffic congestion and emergency access.

In order to minimize impacts to City streets due heavy commercial truck traffic associated with timber harvest and mining/quarry operations west of the City, the City has designated a truck route from Monument Road to Pacific Avenue to Davis Street.

Impacts of new development on the safety and capacity of the road network are currently assessed on a project-by-project basis. Developments are required to make on-site improvements to the road frontage and to provide safe access to the new development. The City has been unable to fund road construction to support new development and generally has not accepted privately constructed roads into its maintained road system. Instead, new roads constructed to City standards must be maintained by a Home Owner or Road Maintenance Association.

4.6 ROADWAY MAINTENANCE.

Roadway maintenance programs must be properly funded and managed to have a lasting beneficial effect on roadway condition and public safety. Maintenance benefits can only be achieved if substantial improvements are made to assure the long-term performance of the City's roadways. Perhaps the most significant factor is the availability and allocation of funds for roadway maintenance and construction. And the amount of funding needed is determined by roadway design, construction, maintenance and rehabilitation, which all affect the rate of roadway deterioration.



The State of California imposes excise taxes on various transportation fuels. California motor vehicle fuel taxes include the gasoline tax, diesel fuel tax, and the use fuel tax. Taxes on fuel used for other motor vehicles are transferred to the state Highway Users Tax Account. These include:

- The “gasoline tax” and “diesel fuel tax” imposed on the use of vehicle fuels at the rate of \$0.18 per gallon including the \$0.09 rate imposed by Proposition 111 (1994).
- The “use fuel tax” is imposed on vendors and users of motor vehicle fuels that are not taxed under either the gasoline or diesel fuel tax, such as liquefied petroleum gas, ethanol, methanol and natural gas (both liquid and gaseous) for use on state highways. Use Fuel Tax rates vary depending on the type of fuel.
- Beginning with the 2010-11 fiscal year, Section 2103 of the Streets and Highways Code was added to allocate funds from a new motor vehicle fuel excise tax that replace previous city and county allocations from the Proposition 42 sales tax on gasoline. This is the change known as the “fuel tax swap of 2010.” Section 2103 funds are allocated to cities on a per capita basis and to counties 75% based on the proportion of registered vehicles and 25% based on the proportion of maintained county road miles.

The allocation of highway user tax revenues is complex, with differing allocations of the \$0.09 Proposition 111 rate versus the \$0.09 original gasoline tax rate, as well as differences in the allocation of gasoline tax revenues from diesel and fuel use tax revenues.

Of the \$0.18 per gallon of user tax revenue, the City receives about \$0.03. In fiscal year 2011-2012 the City received \$102,470 in user tax revenue. The State has projected that the City will receive \$90,227 in user tax revenue in fiscal year 2012-2013.

In 2009 HCAOG retained the services of Nichols Consulting Engineers to prepare a regional Pavement Management Program (PMP). The intent was to identify and prioritize needed maintenance, rehabilitation and reconstruction of roads within the County and Cities. Roads were categorized based on a Pavement Condition Index (PCI). The PCI provides a numerical rating for the condition of road segments within the road network, where 0 is the worst possible condition and 100 is the best. The PCI is used to guide rehabilitation and maintenance decisions for the road network based on a decision matrix. See Table 4-3.

Table 4-3
Pavement Condition Index (PCI) Decision matrix

PCI Decision Matrix				
TIME OF IMPROVEMENT	FREEWAY	ARTERIAL	COLLECTOR	LOCAL
Adequate	>85	>85	>80	>80
6 to 10 years	76 to 85	76 to 85	71 to 80	66 to 80
1 to 5 years	66 to 75	56 to 75	51 to 70	46 to 65
NOW Rehabilitate	60 to 65	50 to 55	45 to 50	40 to 45
NOW Reconstruct	<60	<50	<45	<40

Based on the results of condition surveys conducted in the Fall of 2009, Nichols Consulting Engineers determined that the City's average PCI is 61. This is considered to be in the “FAIR” condition category. The City retained Nichols Consulting Engineers to follow-up on the 2009 Pavement Management Program to identify potential costs associated to the City's maintenance backlog. Based on Nichols survey and rating dated August 2011, there are approximately 30 streets or portions of streets with a PCI rating of 40 or less. Nichols determined that it would

cost the City approximately \$3.7 million (2011 dollars) to fix all the roads in a one year period. Table 4-3 summarizes the costs for the next 20 years. Basically, the City needs about \$5.3 million (in real 2011 dollars) over the next 20 years to improve and maintain the City's street network at a PCI rating in the high 70's to low 80's.

Table 4-4
Estimated Road Repair Costs

Year	Estimated Construction Costs (2011 \$)	Cumulative Construction Costs (2011 \$)		Year	Estimated Construction Costs (2011 \$)	Cumulative Construction Costs (2011 \$)
2012	\$ 2,571,500	\$ 2,571,500		2022	\$ 7,062	\$ 4,049,651
2013	\$ 295,403	\$ 2,866,903		2023	\$ 9,652	\$ 4,059,303
2014	\$ 151,990	\$ 3,018,893		2024	\$ 11,056	\$ 4,070,359
2015	\$ 202,767	\$ 3,221,660		2025	\$12,375	\$ 4,082,734
2016	\$ 172,414	\$ 3,394,074		2026	\$ 77,348	\$ 4,160,082
2017	\$ 210,519	\$ 3,604,593		2027	\$ 48,339	\$ 4,208,421
2018	\$ 81,071	\$ 3,685,664		2028	\$ 114,435	\$ 4,322,856
2019	\$ 22,733	\$ 3,708,397		2029	\$ 55,830	\$ 4,378,686
2020	\$ 317,667	\$ 4,026,064		2030	\$ 137,876	\$ 4,516,562
2021	\$ 16,525	\$ 4,042,589		2031	\$ 802,663	\$ 5,319,225

In an attempt to generate much needed funds for road repairs, the City placed Measure X on the June 2012 ballot. Measure X would allow the City to issue \$2 million dollars in general obligation funds, maturing 15 years from their issue date and bearing an interest rate not to exceed 4.25%. It was estimated that the annual parcel tax assessment would be about \$115.00 per \$100,000 of assessed value. In addition, the City was going to contribute an additional \$825,000. It was estimated that the \$2,825,000 would allow the City to repair about 11.5 miles or 90% of the City's roads.

Because Measure X was a tax, it required a supermajority 2/3 voter approval. Measure X received 62.59 percent of the votes. The measure needed 66.66 percent to pass. Because the vote was so close, the City decided to put the matter to the voters again. Measure J was placed on the November 2012 ballot. Measure J also failed to garner the required votes. Measure J received 55.61% of the vote.

2012 Election Results				
Measure	Yes	%	No	%
"X"	437	62.7%	260	37.3%
"J"	595	55.61%	475	44.39%

4.7 PUBLIC TRANSPORTATION



Providing adequate public transportation to serve the needs of Rio Dell residents who prefer or require public transportation for mobility is a priority of the Circulation Element. Increased use of public transportation will reduce air pollution, greenhouse gas emissions, traffic congestion, parking demand, energy consumption and the cost of personal transportation.

The 2008 Regional Transportation Plan contains a comprehensive description of public transit services of fixed and flexible route providers. The following fixed-route systems serve the county's public transit needs: Redwood Transit System, Eureka Transit System, Southern Humboldt Rural Transit System, Arcata & Mad River Transit System, Klamath/Trinity Non Emergency Transportation (K/T Net), and Blue Lake Rancheria.

The Humboldt Transit Authority (HTA), established in 1975, provides transit services along the US 101 corridor in Humboldt County. A joint powers agreement was signed by Humboldt County and the cities of Arcata, Eureka, Fortuna, Rio Dell and Trinidad to finance, acquire, construct, manage, operate and maintain public transit systems and related property and facilities.



Funding for support of the operations and maintenance of HTA is obtained primarily through fares, and Transportation Development Act (TDA) funds that accrue to each entity of HTA. The proportion of TDA funds that are paid by the cities and the county for the support of HTA are based on the census population of each city, compared to the population of all the cities. Humboldt County provides 50 percent of the TDA funds, and the participating cities provide the other 50 percent (City of Eureka 25.6 percent, City of Arcata 13.1 percent, City of Fortuna 8.1 percent, City of Rio Dell 2.8 percent and City of Trinidad .4 percent) of TDA funds for the support of HTA. The member entity assessments have not been adjusted since 1976.



The Humboldt Transit Authority operates the Redwood Transit System (RTS) which provides bus service from Trinidad to Scotia. The "Mainline" route includes 3 stops in the City. One of the stops is located on Center Street. This stop does not have bus shelters. The bus stop on Rigby Avenue and Davis Street does include a bus shelter on the northbound route on the east side of Rigby. The third location is on Wildwood Avenue in front of City Hall. The northbound stop does have a bus shelter, but the southbound route does not.

The "Mainline" north route makes 8 stops a day during the week in the City and the south route makes 7 stops a day during the week. On Saturdays and Sundays there are 4 northbound and southbound stops in the City.

RTS also provides an "Intercity" route from Eureka to Garberville. The "Intercity" route includes a stop at the Davis Street and Highway 101 interchange. Both the northbound and southbound stops are poorly signed and do not include bus shelters. This route provides 4 weekday stops.

Other City public transit services, include Redwood Coast Transit (linking Crescent City and Humboldt County), Greyhound Bus Lines, AMTRAK, and City Cab.

4.8 Bicycle and Pedestrian Travel

The City of Rio Dell has limited non-motorized transportation facilities. There are a number of informal trails throughout the community that provide connections to the town center and neighborhood destinations, as well as access to the Eel River. City staff has participated in non-motorized transportation project identification for inclusion in several regionally significant transportation plans, such as the Humboldt Peopled Powered Pathways (HP3), the 2012 Regional Bicycle Plan and the 2010 Regional Trails Master Plan

This Plan supports improvements that accommodate bicycles, pedestrians, and the mobility-challenged population. These improvements mostly include sidewalks, crosswalks, trails, and bicycle lanes. While walking or cycling between destinations is a choice for some, it is a necessity for others who do not have access to motorized transport. Development of bicycle and pedestrian facilities can reduce vehicle miles traveled, enhance communities, increase the opportunities for an active and therefore healthy lifestyle, and reduce greenhouse gas emissions.

The Circulation Element provides the framework for developing a trail network or active transportation system in the City. The various types of natural surface, paved off-street trails and on-street facilities comprise the system.

The trail network will be comprised of a variety of trail types to accommodate different user groups and topography. The trail classification system is organized by natural and paved surface trail types, which are described below. The classification system is used to identify existing and proposed trails in Humboldt County.

Natural Surface Trails are primarily unpaved trails that serve a variety of recreational user groups and may occasionally serve transportation (e.g., commuter use) and local connectivity (e.g., school and local errand access) needs. Natural surface trails are classified into multipurpose, equestrian, and developed/improved trails.

Multipurpose Trails accommodate a wide variety of user groups. These paths, while constructed with native surface materials or compacted, crushed or granulated stone, provide wide treads and clearances (i.e., width varies from four feet to eight feet) potentially accommodating significant volumes of hikers, equestrians and bicyclists. Where hikers, bicyclists and equestrians are allowed on the same trail "Yield to" signage should be installed to notify users of rights-of-way.

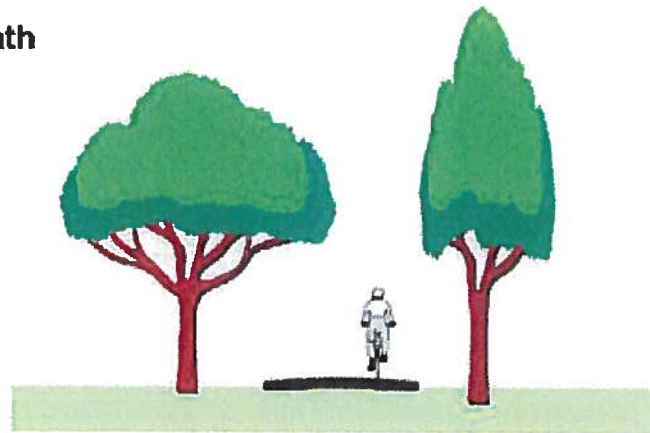
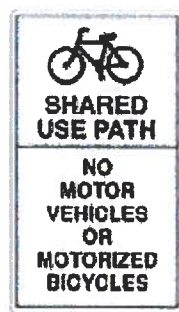
Equestrian Trails should provide for local- and long-distance trail rides, and may also serve multiple user types. Basic dimensional requirements include an 18 to 36 inch wide trail tread and appropriate horizontal clearances. In high use and developed areas, a minimum tread width of seven to eight feet should be provided to allow for riding side by side as well as opportunities for passing when bidirectional movements are expected. Compacted natural soil is typically the preferred trail tread, but surfacing trails with crushed fines may be preferred in Humboldt County due to climate conditions.

**BLANK
FIGURE 4-2
TRAILS DIAGRAM**

Developed/Improved Trails accommodate walking and hiking in a variety of contexts and are the minimum trail standard typically incorporated into a regional trails network. They generally have a compacted natural soil surface (or surfaced with crushed fines to improve trail conditions due to climate) and widths ranging from 18 inches to 48 inches. These types of facilities are typically located in open space areas, at local and county parks, in undeveloped public rights-of-way such as utility corridors, and in parklands and resource lands.

Paved trails and on-street routes are intended to meet Caltrans and AASHTO dimensional, geometric and functional standards for Class I bike paths, Class II bike lanes, and Class III bike routes that serve a variety of commuter trips, utilitarian trips, and recreational trips. Paved surface trails are further described below.

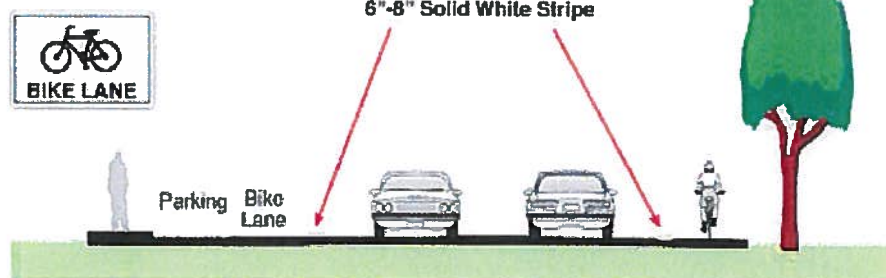
Shared Use Path



Class I Bike Path

CLASS I BIKE PATH – Class I bikeways are typically referred to as **multi-use** or **shared use paths**. They are paved and separated from streets and highways. For a two-way path, the minimum width is 8 feet (2.4 meters) (per Caltrans design criteria). Class I bikeways are shared by bicyclists and pedestrian, and in some cases equestrians. They are popular with novice cyclists; experienced bicyclists may avoid these paths to avoid conflicts with multiple users.

Bike Lane

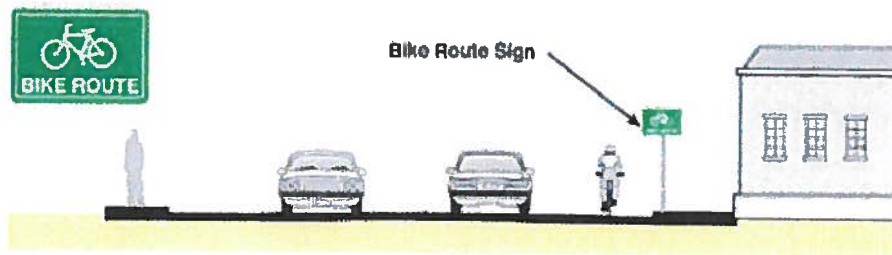


Class II Bike Lane

CLASS II BIKE LANE – Class II is often referred to as a **bike lane**. It is striped and stenciled lane for one-way travel on a street or highway. When properly designed, bike lanes make

motorists more aware of bicyclists. The minimum width of a lane is 4 feet (1.2 meters), or 5 feet (1.5 meters) if the lane is next to a curb or parked cars.

Bike Route Signed Shared Roadway



Class III Bike Route

CLASS III BIKE ROUTE – Generally referred to as a **bike route**, Class III bikeways are signed to indicate that bicyclists share the roadway with motor vehicles, and sometimes pedestrians (not recommended). These are recommended to connect where there are gaps in Class I or Class II bikeways.

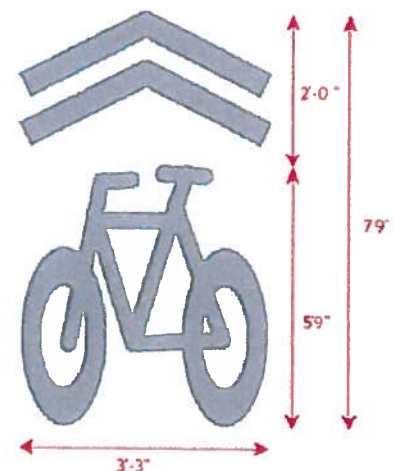
In addition to Caltrans' standard Class III bikeway design, the Regional Bicycle Plan proposes two modified classifications for Class III bike routes, one "enhanced" and one "rural route."

ENHANCED CLASS III BIKEWAY – This designation is for bike routes that add one or more design elements other than standard Class III signs. Enhanced Class III bikeways augment the bike facility with pavement markings and/or signage. Roadway space requirements are the same as for other Class III facilities.

One way to enhance the Class III design is to paint a fog line on the roadway, which visually delineates between the edge of the travel lane and the parking zone or shoulder. Fog lines also visually constrict the travel lane, which makes some drivers slow down.

A Class III design can also be enhanced with "Share the Road" signs placed in tandem with "Bike Route" signs, and/or on other signposts. Another way to enhance the bike route is to paint *shared-use arrows* (commonly called "sharrows") in the roadway.

RURAL ROUTE CLASS III BIKEWAY – This augmented Class III Bikeway is intended for rural, two-lane roads that cyclists frequently use, but whose width and/or sight distances make them poor candidates for a standard bike route. Identifying these roads with signs as "Bike Routes" can potentially attract more cyclists where engineering cannot improve roadway conditions to accommodate more bicycle traffic.



A "Sharrows" Symbol



In these cases, “Share the Road” signs can be installed to increase motorists’ awareness that cyclists are riding on the roadway. Appropriate signs include a yellow bicycle warning sign and “Share the Road” or “Share the Road with Bicyclists” placard.

The Regional Trails Master Plan includes detailed information on trail design and standards, including trail cross sections, accessible trail design, trailhead layout and trail support facilities.

Safe Routes to School is an international movement that has taken hold in communities throughout the United States. The concept is to increase the number of children who walk or bicycle to school by funding projects that remove the barriers that currently prevent them from doing so. Those barriers include lack of infrastructure, unsafe infrastructure, lack of programs that promote walking and bicycling through education/encouragement programs aimed at children, parents, and the community. Some of Safe Routes to School’s benefits:

- Makes safer school routes by improving intersections and sidewalks.
- Reduces traffic congestion and greenhouse gas emissions from automobiles.
- Improves students’ health and their sense of their surroundings.
- Builds working relationships and friendships in the community.
- Promotes and builds active lifestyles and livable communities for everyone.

In 1969, 50% of school children in the United States walked to school (US Centers for Disease Control and Prevention). Today in Humboldt County, 20% of school children walk or bike to school.

There are two schools in Rio Dell, the Eagle Prairie Elementary School and the Monument Middle School. The schools are located on Center Street and adjacent to one another. The City being fairly compact is ideal for walking; therefore the school district does not provide busing for any of its students.

Eagle Prairie Elementary serves grades K-5 and Monument Middle School serves grades 6-8 in the Rio Dell. About half of the total students walk or bike to school. The rest of the approximately 500 students are driven to school. Safety concerns around walking and biking include streets without sidewalks, crossing streets, and narrow unpaved streets. A crossing guard helps students cross Wildwood and Center Streets.

The City of Rio Dell received funding in the 2010 cycle, which redesigned the drop-off/pick-up area of the school and improved access near at the intersection of Second Avenue and Davis Street. This has increased safety for students walking and biking. The City applied for another grant during the 2012 cycle. The City was awarded a grant in the amount of \$152,300. The City is providing an additional \$17,400 towards the improvements. The project includes a lighted crosswalk at the intersection of Wildwood Avenue and Central Street, crosswalks, sidewalks and bulbouts.

4.9 Rail Transportation

Northern California's vast stands of redwood trees presented a problem - how to get them to market? Their immense size and weight did not allow for normal lumbering practices. The answer lay in the railroad. The first railroads on the western coast were built in 1854 and for the next century, railroads played a vital role in a thriving lumber industry.

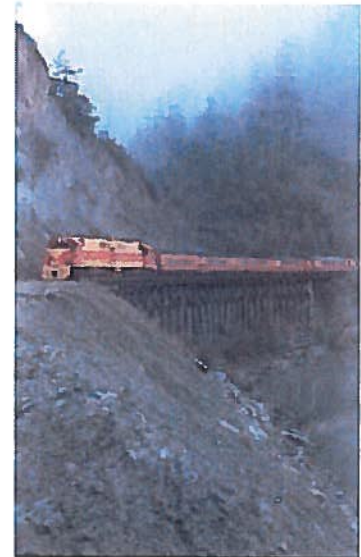


The Northwestern Pacific Railroad, at its height, was an amalgamation of some sixty different companies. Its territory extended along the Pacific coast from San Francisco to California's Humboldt County, 100 miles shy of the Oregon State line. Some of the forerunners had built extensive and substantial operating lines. Others were short lines, such as the many logging lines in the Humboldt Bay region. Nearly a third consisted of companies which incorporated but never laid a foot of track. All of them contributed, in some fashion, to the rich heritage of the NWP.

The line was opened by Northwestern Pacific in 1907 and was owned jointly by Southern Pacific and ATSF. After merging with the Eureka & Klamath Railroad in 1914, Southern Pacific bought the Santa Fe's equal interest in the line in 1929. The Northwestern Pacific Railroad, one of Northern California's historic entities, survived as a Southern Pacific wholly-owned subsidiary. Petaluma was the NWP's base of operations. "Sprint Trains" and their crews originated there, running both north and south on the line.

In 1984 the track from Outlet, near Willits, north to Arcata was sold to a new company, the Eureka Southern Railroad. By the early 1990's most of the traffic originated in Eureka and the surrounding area.

The Eureka Southern went bankrupt in April of 1992 and sold its assets to the North Coast Rail Authority, which designated the North Coast Railroad to run the line. In its first few months, the North Coast Railroad leased NWP diesels, recreating the days when the Northwestern Pacific still owned the line from Willits to Eureka. The NWP interchanged with the North Coast Railroad in Willits, forwarding the train to the Southern Pacific at Suisun City. For the last few years, trains that negotiated the scenic north end of the line were run only at night. The line shut down in 1997 when it was impacted by major floods and landslides.



5.0 Air Transportation

The Arcata-Eureka Airport located in McKinleyville is the county's sole commercial airport. Maintaining a wide selection of carrier, flight, and destination options is a high priority to the County as a whole. Given the County's remote location, providing convenient travel connections to urban centers is an important quality of life amenity and essential to maintain Humboldt's connections to the world economy.

Rohnerville airport is located 0.8 miles south of Fortuna. It serves the City of Fortuna, Rohnerville and surrounding communities of west-central Humboldt County. This airport is situated atop a plateau, overlooking the Eel River, amid rural residential and undeveloped

land. Its runways end at rapidly falling terrain, south of the airfield. Vehicular access to Rohnerville Airport is from Airport Road via Drake Hill Road and US 101.

The airport has one runway, Runway 11-29 which is 4,007 feet long and oriented roughly northwest/southeast. Runway 11-29 offers non-precision instrument approach capabilities. There are two banks of hangars, located at the west end of the airport, consisting of box hangars, T-hangars and portable T-hangars. Fifteen tie-downs are positioned between these hangars. The transient apron is located mid-field and consists of five tie-downs, and one portable T-hangar. A pilots' lounge is immediately west of the transient apron. Fuel is dispensed from a self-fuel card operated system.

A California Department of Forestry and Fire Protection (CAL FIRE) station has been operating on the east side of Rohnerville Airport since 1964. The CAL FIRE station is an air attack base, as well as a fire-fighter training facility. CAL FIRE equipment includes water and retardant tanks, one hangar used to store helicopters, an apron that provides parking for up to four aircraft and a fuel dispensary.

5.0 GOALS, POLICIES, AND PROGRAMS

The Circulation Element proposes several goals and policies to support important roadway functions, including pedestrian and bicycle modes of transportation, rather than serving the single purpose of automobile traffic.

Goal CE 1

Develop and maintain a safe, balanced vehicular and non-vehicular transportation system to meet the mobility needs consistent with General Plan land use goals and policies.

Policy CE 1-1

Develop and maintain the Circulation Plan network of arterials, collectors, and local streets as identified in Figure 4-1 of the Circulation Element. The existing and proposed streets should be maintained and designed to serve the functions they are intended to serve, with adequate capacity and safety.

Implementation CE 1-1.a. Design, construct, upgrade, and maintain the automobile, bicycle and pedestrian circulation system according to the functions they are intended to serve.

Responsibility:	Project proponents, Community Development, Public Works and the City Engineer.
Timeframe:	Ongoing.
Resources:	Capital Improvement Program, project proponents, street funds, general obligation bonds, potential improvement districts and impact fees.

Implementation CE 1-1.b. Coordinate with the County, CALTRANS and the Humboldt County Association of Governments (HCAOG) in addressing regional transportation issues.

Responsibility:	Community Development, Public Works and the City Engineer.
Timeframe:	Ongoing.
Resources:	Local, State and Federal programs.

Implementation CE 1-1.c. Explore the potential of designating one-way streets on narrow, crowded (parked vehicles) streets to enhance traffic flow and emergency access.

Responsibility: Community Development, Public Works, City Engineer and the Traffic Committee.
Timeframe: Ongoing.
Resources: Capital Improvement Program, General Fund and street funds.

Policy CE 1-2

Design street systems in residential areas to minimize through traffic, to encourage internal movement by bicycling and walking, to provide safer and quieter neighborhoods, to minimize vehicular conflicts at intersections and to ensure that the impact of recreational traffic on local residents is minimized.

Implementation CE 1-2.a. Discourage driveway encroachments on arterial and collector streets.

Responsibility: Community Development, Public Works and the City Engineer.
Timeframe: Ongoing.
Resources: Project proponents.

Implementation CE 1-2.b. Identify and provide directional signs to recreational uses that maximize use of arterial and collector streets and minimize or eliminate traffic through residential areas.

Responsibility: Community Development, Public Works and the City Engineer.
Timeframe: Ongoing.
Resources: General Fund, Capital Improvement Program and street funds.

Implementation CE 1-2.c. In order to improve visibility and reduce the number of vehicles that run the stop sign, encourage Caltrans to redesign the Highway 101 southbound off-ramp at Wildwood Avenue to provide for a perpendicular intersection with Wildwood Avenue.

Responsibility: Caltrans, Public Works and the City Engineer.
Timeframe: Ongoing.
Resources: State funding, including grant funding.

Implementation CE 1-2.d. Improve the intersection of Scenic Way and Eeloa Avenue to enhance vehicular, pedestrian and bicycle safety.

Responsibility: Public Works and the City Engineer.
Timeframe: Ongoing.
Resources: Capital Improvement Program, General Fund and street funds State funding, including grant funding.

Goal CE 2

Maintain a satisfactory Level of Service (LOS) for automobile traffic.

Policy CE 2-1

Maintain minimum traffic Level of Service (LOS) C.

Implementation CE 2-1. Evaluate traffic impacts of major developments for consistency with LOS standards.

Responsibility: Community Development, Public Works and the City Engineer.
Timeframe: Ongoing. Require traffic reports with major development proposals.
Resources: Project Proponents.

Goal CE 3

Maintain and enhance river access and encourage bicycle use and walking as an alternative to automobile traffic and for community health and enjoyment throughout the community.

Policy CE 3-1

Provide an extensive network of pedestrian, including the physically disabled and bicycle pathways to support community health and provide safe alternatives to automobile use.

Implementation CE 3-1.a. Require project proponents to design and construct facilities for bicycle and pedestrian routes as identified in the Circulation Element.

Responsibility: Community Development, Public Works and the City Engineer.
Timeframe: Ongoing. Require traffic reports with major development proposals.
Resources: Project Proponents.

Implementation CE 3-1.b. Acquire fee title or easements to provide for the construction of bicycle and pedestrian routes as identified in the Circulation Element.

Responsibility: Community Development, Public Works and the City Engineer.
Timeframe: Ongoing
Resources: General Fund, Capital Improvement Program, project proponents, street funds and grants.

Implementation CE 3-1.c. Integrate bicycle and pedestrian routes with transit stops.

Responsibility: Community Development, Public Works and the City Engineer.
Timeframe: Ongoing
Resources: Include integration with public works projects and planning permit approvals.

Implementation CE 3-1.d. Explore establishing a rail with trail corridor along the existing railroad along the Scotia Bluffs.

Responsibility: Community Development, Public Works and the City Engineer.
Timeframe: Ongoing

Resources: Grant funds.

Policy CE 3-2

Provide continuous sidewalks along all streets. Maintain sidewalks in good repair.

Implementation CE 3-2.a. Explore a program to fund sidewalk improvement or installation where no sidewalks exist, including sharing of costs with property owners, loans payable at time of sale, etc.

Responsibility: Community Development, Public Works and the City Engineer.
Timeframe: Ongoing
Resources: General Fund, Capital Improvement Program, project proponents, street funds, property owners and grants.

Implementation CE 3-2.b. Identify major pedestrian routes and, where they adjoin streets, prepare roadway sections that encourage pedestrian use.

Responsibility: Community Development, Public Works and the City Engineer.
Timeframe: Prior to major street improvements
Resources: General Fund. Repair and install with public works projects and planning permit approvals.

Implementation CE 3-2.c. Repair or install sidewalks on all streets in conjunction with public works and private development projects.

Responsibility: Community Development, Public Works and the City Engineer.
Timeframe: Ongoing, public works projects and planning permit approvals
Resources: General Fund, Capital Improvement Program, project proponents, street funds, property owners and grants.

Implementation CE 3-2.d. Where possible, use traditional sidewalk design with a planter strip between the curb and sidewalk,

Responsibility: Community Development, Public Works and the City Engineer.
Timeframe: Ongoing, with public works projects and planning permit approvals
Resources: Development approvals.

Policy CE 3-3

Provide trees and/or landscaping along streets and pedestrian routes. Where street widening would remove trees and/or landscaping, investigate alternative roadway configurations that would preserve the trees and/or landscaping.

Implementation CE 3-3.a. Review proposed projects, including public works projects that may impact existing trees and/or landscaping

Responsibility: Community Development, Public Works and the City Engineer.
Timeframe: Ongoing
Resources: Development approvals, grant funds.

Policy CE 3-4

Maintain, enhance and reestablish historic river access points and develop trails and staging areas to encourage access to the river.

Implementation CE 3-4.a. Review proposed projects, including public works projects that may impact existing or potential trails and/or staging areas as identified in Figure 4-2 of the Circulation Element and require dedications and improvements as part of project approvals.

Responsibility: Community Development, Public Works and the City Engineer.
Timeframe: Ongoing
Resources: Project proponents.

Implementation CE 3-4.b. Utilize City funds where appropriate and pursue grant funding for the establishment, reestablishment, maintenance and enhancement of existing or potential trails and/or staging areas as identified in Figure 4-2 of the Circulation Element.

Responsibility: Community Development, Public Works and the City Engineer.
Timeframe: Ongoing
Resources: General Fund, Capital Improvement Program, street funds, property owners and grants

Goal CE 4

Promote public transit service to, from and within the City.

Policy CE 4-1

Participate in efforts to maintain and enhance public transit opportunities within the City.

Implementation CE 4-1.a. Maintain and encourage use of public transit by encouraging providers to maintain and expand schedules that serve the community.

Responsibility: Humboldt Transit Authority (HTA), the Humboldt County Association of Governments (HCAOG), CALTRANS, Community Development, Public Works and the City Engineer.
Timeframe: Ongoing.
Resources: Local, State and Federal transit funding.

Implementation CE 4-1.b. Provide convenient bus stop locations and shelters.

Responsibility: Humboldt Transit Authority (HTA) and the Humboldt County Association of Governments (HCAOG), CALTRANS, Community Development, Public Works and the City Engineer.
Timeframe: Ongoing.
Resources: Local, State and Federal transit funding.

Goal CE 5

Promote and support re-establishing regional rail service in and out of the County.

Policy CE 5-1

The City supports re-establishing regional rail service, including cargo/freight and tourists excursions in and out of the County.

Implementation CE 5-1.a. Encourage re-establishing regional rail service in and out of the County.

Responsibility: North West Pacific Railroad (NWPR), Northern Counties Logging Interpretative Association, (NCLIA) the Humboldt County Association of Governments (HCAOG), CALTRANS, Community Development, Public Works and the City Engineer.

Timeframe: Ongoing.

Resources: Public/Private Partnerships, Local, State and Federal transit funding.

Goal CE 6

Promote and support the establishment of an Off Highway Vehicle (OHV) Park for City and County residents and visitors.

Policy CE 6-1

The City supports the establishment of an Off Highway Vehicle (OHV) Park.

Implementation CE 6-1.a. Support the establishment of an Off Highway Vehicle (OHV) Park.

Responsibility: California State Parks, Division of Off Highway Motor Vehicle Recreation, County of Humboldt, City of Rio Dell.

Timeframe: Ongoing.

Resources: Grant funding, including Green Sticker Funds, Public/Private Partnerships

Jim Stretch

From: Jerome Carman <jcarman@redwoodenergy.org>
Sent: Thursday, May 23, 2013 11:55 AM
To: Jim Stretch
Cc: cralston@riodellicity.com; 'Patricia Terry'
Subject: Initial Solar Assessment For Rio Dell
Attachments: Rio_Dell_Solar_Final_Report_4-16-2013.docx

Hi Mr. Stretch,

This is Jerome Carman with Redwood Coast Energy Authority. I hope this email finds you well.

Attached is the initial solar analysis that we conducted for you. It was my hope to meet with you and discuss this analysis but it does no good sitting here in our office. The primary point regarding this is that it is a rough estimate and should not be used as a resource for actual costs. Projected costs are only an estimate to get an idea of solar as a possible investment.

Patricia and I are eager to meet with you regarding this analysis and regarding additional efficiency upgrade options you have. Feel free to call either one of us at any time to schedule a meeting:

269-1700

Patricia Terry: pterry@redwoodcoastenergy.org

Jerome Carman: jcarman@redwoodcoastenergy.org

Best Regards,
Jerome

--

Jerome K. Carman, EIT 145943
Program Assistant
Redwood Coast Energy Authority
jcarman@redwoodenergy.org
707-269-1700

We Have Moved! RCEA is now located at 633 3rd St. on the corner of 3rd and H in Eureka.

CIRCULATION ELEMENT
of the
RIC DELI GENERAL PLAN
1977

CITY COUNCIL ADOPTION - October 18, 1977
PLANNING COMMISSION APPROVAL - August 25, 1977

Preparation of this element was funded in part by Grant 1008.302 furnished by the California Governor's Office of Planning and Research in cooperation with the U.S. Department of Housing and Urban Development, under the provisions of Section 701 of the Housing and Community Development Act of 1974.

RIO DELL CIRCULATION ELEMENT

CITY COUNCIL

Ralph Roberts, Mayor

Millard Barisdale, Vice-Mayor

Walter Close

Gary Thrap

Frank Cardoza

PLANNING COMMISSION

Norman Ambrosini, Chairman

Carroll Horner, Vice-Chairman

Paul Primifiore *

Lasca Withrow

Richard Farsells

CITY ADMINISTRATOR

Dale Livingston

CITY PLANNER

Matt Morris, Five Cities Circuit Team

* Resigned

CIRCULATION ELEMENT

Involved Staff

Glen Summerfield, Public Works Director, Rio Dell

Matt Morris, City Planner, Five Cities Circuit Team

Bill Black, Administrative Assistant, Five Cities Circuit Team

Pamela Goodwin, Circuit Secretary, Five Cities Circuit Team

John Schwabe, Planning Intern

Tim Hanan, Planning Intern

Dave Anderson, Planning Intern

Joel Canzoneri, Planning Intern

RIO DELL GENERAL PLAN CIRCULATION ELEMENT

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RIO DELL GENERAL PLAN CIRCULATION ELEMENT

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CIRCULATION ELEMENT

INTRODUCTION

The safe movement of people and goods is essential to every community. The demands placed on the City's circulation system of streets, roads and highways result from individual choices. Among these choices are where people live, where they work, where they shop, and how they travel from one place to another.

NEED

Because these trips are the lifeblood of our communities, the legislature decided in 1955 that each city and county should prepare as part of its General Plan:

"A Circulation Element consisting of the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals and facilities, all correlated with the land use element of the Plan."

Such an element was part of the 1968 General Plan. In 1976 the City Council directed that the Circulation Element be revised.

Present

An inventory of the Rio Dell street and sidewalk system was undertaken during 1975-76 by student interns from Humboldt State University.

The street width map (C-1) indicates that within Rio Dell's public and private street system, there were:

	<u>Approximately</u>
Streets 13 feet or less in width:	6,000 feet [±]
Streets 20 feet or less in width, but more than 13 feet wide:	15,000 feet [±]
Streets more than 20 feet in width:	<u>45,000 feet[±]</u>
Total length	66,000 feet [±]
Improvements of right of way edges included those with:	
Full improvements (curbs, gutters, and sidewalks):	17,700 feet [±]
Partial improvements (curbs, and gutters only):	20,600 feet [±]
Partial improvements (sidewalks only):	<u>1,300 feet[±]</u>
Total	39,600 feet [±]

Future

In an "era of fiscal limitations" identified by Governor Brown, California cities are placed in the unenvied position of having less resources to use in meeting the demands and needs of tourists, residents, and out-of-town shoppers. In addition, the quality of residential environments must be maintained while facilitating accessibility to all parts of the city.

CIRCULATION GOALS of the CITY OF RIO DELL

- . Provide a street system that considers the neighborhood as the basic planning unit.
- . Develop a balanced transportation system of streets, public transit, and a freeway.
- . Develop adequate off-street parking facilities in appropriate locations, and continue transportation planning on a local and regional basis.
- . In light of new technology and changing desires of Rio Dell's citizens, continue long-range land-use and transportation studies by the City Council, Planning Commission and HCAOG, to evaluate the future role of transportation in Rio Dell and the region.
- . Maximize return on capital investments in city infrastructure.
- . Plan for an adequate system of bicycle lanes and trails.

OBJECTIVES

Regional Cooperation

To maximize regional cooperation by adopting the HCAOG Regional Transportation Plan (by reference) as a portion of Rio Dell's Circulation Element. Where there are conflicts between the documents, the Circulation Element's text, maps, or amendments will be binding.

Public Transit

Intercity service would be provided, where feasible, by joint powers agreement to serve college and university students, workers, and shoppers, etc. The Humboldt Transit Authority (HTA) currently fills this role.

Program Capital Improvements

- . Plan and Program investments in new city infrastructure and maintenance to result in coherent development assisting and fulfilling city plans.

Roads

- . Capacity, safety and structural improvements made to upgrade the roads based on existing travel needs.
- . New and/or improved roads constructed to provide adequate access, including ingress and egress, to newly developing areas in accordance with the City's General Plan.

Parking

- . Keep congestion problems from strangling downtown.
 - . Additional off-street parking facilities developed in the Downtown Area.
 - . Adequate parking provisions for residents of Rio Dell and Scotia seeking to patronize downtown business.
 - . Adequate parking provisions appealing to the travelling public, and allowing them to purchase needed items in Rio Dell.
- . Maintain existing level of business:
 - . Establishments
 - . Sales Volume
 - . Sales tax revenues for the City.
- . Allow a steady increase in volume and variety of downtown business establishments through provisions of appealing well-sited, & adequate off-street parking.
- . Utilize appropriate and feasible methods of acquiring and developing off-parking facilities.
- . Development of a bikeway master plan for the City of Rio Dell. This bikeway plan will be a segment of the Circulation Element upon adoption by the City Council.

POLICIES

Parking

- . Development of additional off-street parking facilities in the Downtown Area.
- . Maximum utilization of private voluntary cooperation (Chamber of Commerce, downtown merchant groups, etc.).
- . Maximum utilization of developer donation.
- . Utilization of funding options for redevelopment of downtown (HUD Community Development Block Grants, and tax-increment bonding when feasible, as part of a possible "Core Area Redevelopment Program.").
- . Possibility of forming a special downtown improvement district to raise funds for rehabilitating the core area.
- . A Parking Zone (P-1) should be developed, and deemed consistent with high-density land-use within one block of Wildwood Avenue south of Davis Street.

Curbs, Gutters, Sidewalks (NOTE: This Section should be amended where the final Council-City Engineer policy on the Goddi Sidewalk differs. The Council policy should be inserted here.)

Curbs, Gutters, Sidewalks (Cont.)

- . It is the policy of the City of Rio Dell that where a building permit is required for construction on a private drive, a 40 foot setback (from the centerline of the future street) is required. The first 20 feet from the centerline will be used for street, curb, gutter, utility and sidewalk uses, with the usual 20 foot setback for construction.
- . It is the policy of the City of Rio Dell that sidewalks, curbs and gutters be constructed as per specifications of the California Department of Transportation as modified by streets standards issued by the California League of Cities.
- . It is the policy of the City of Rio Dell that curbs, gutters and sidewalks will be required for all new construction located on any city street, or any private drive, road, or way, etc. where an irrevocable offer of dedication has been made to the City.
- . Building permits for structures will be issued only when submitted plans include installation of sidewalks, curbs, and gutters (where none exist presently). The final inspection and certificate of occupancy shall not be signed by the Public Works Director until the above mentioned and required concrete work is completed to his satisfaction.

Residential

- . Subdivision designs for land abutting arterial streets is of particular importance to the City. This is because the City wishes to prevent "commercial strip zoning" in residential neighborhoods.
- . Marginal access streets may be required between residential lots and the arterial street, or
- . Lots adjacent to an arterial should be made extra deep, and face away from that street, with "screen" planting, parkstrips, block walls, or other measures along the rear to protect residents from the detrimental effects of high-way traffic.
- . In general, streets should intersect as nearly as possible at right angles, both for reasons of traffic safety and to avoid difficult lotting problems.
- . Intersections of minor streets to major streets should be kept to a minimum.
- . Corners at intersections should be rounded, with a radius of 20-25 feet, so as to facilitate turning movements.
- . Tangents of 100-200 feet (depending on the type of street and speed of travel) should be provided between reverse curves (where a street first curves in one direction and then curves in the other direction).

Residential (Cont.)

- . Desired street right-of-way widths for various types of streets are shown in Chart 1.
- . Any new cul-de-sac in the City of Rio Dell will extend no more than 400 or 500 feet from a connecting street to the center point of the turnaround.
- . Each cul-de-sac in the City should have a turnaround at its dead end. The turnaround shall have a minimum radius of 45 feet, to include 40 feet (80 feet on a diameter basis) of paving, a curb and gutter section, and a 3 foot wide sidewalk.

Commercial

- . Commercial and industrial alleys shall be at least 20 feet in width and designed so as to facilitate ingress and egress of delivery trucks and vans.
- . Frontage roads will be encouraged within Freeway Commercial and Industrial Park land-uses, to maximize efficient land utilization of rear areas not fronting onto collector street or a freeway interchange. These frontage roads may be public right-of-ways, or private circulation systems utilized by the general public.

Bikeways

- . The first step in developing a bikeway system is usually placing signs along a designated bike route. This type of bikeway is called a Class III Bikeway.
 - . Class III routes
 - . Generally Class III routes should indicate:
 - . Routes with low traffic volume connecting activity centers.
 - . Routes with low traffic volume also having acceptable slope angles, or
 - . Recreational routes with the possibility of scenic views, continuity to points of of recreational interest, and recreational facilities.
 - . To drivers that cyclists must be anticipated.
 - . Typically do little to insure bicycle safety.
 - . Shared Bikeway Criteria (Class III Bikeway)
 - . Average daily traffic (ADT) of less than 1000 motor vehicles.
 - . Bicycle volume is moderate, or will be once the routing and signing channels and encourages bicycle riders.
 - . Truck volume is low (less than 5% of ADT).

- . Adequate space available in the width of the outside lane.
- . 85% of average daily traffic travels at 32 mph or less.
- . Bike Lanes (Class II Bikeways)
 - . Bike lanes will be designated by the Rio Dell City Council to separate bicycle traffic and motor vehicle flows, upon the advice and recommendation of the Planning and/or Park and Recreation Commission, and the Director of Public Works.
- . Restricted Bikeway Criteria (Wildwood Avenue and Davis Street)
 - . More than 1000 average daily traffic (ADT).
 - . Bicycle volume high (only Center Street currently has this characteristic).
 - . Truck volume is moderate to heavy (more than 5% of average daily traffic consists of trucks).
 - . Adequate space available in the width of the outside lane.
 - . 85% of the average daily traffic travels at 40 mph or more.
- . Lane Width
 - . No bicycle lane should be less than 4' in width.
- . Future Width Lines
 - . Future width lines are hereby established and shall apply to those streets designated and shown on the minimum right-of-way standards map, which is on file in the office of the Rio Dell City Clerk. The future width lines shall be established so that one-half of the distance shown on the minimum Right-Of-Way Standards Map shall be on each side of the centerline of the original right-of-way.
 - . From and after the date of establishing any future width line, all yards required by the zoning ordinance will be measured from the future right-of-way lines instead of the existing front or side property lines of each lot.
 - . Where no yard is required under the terms of the ordinance, no building shall be erected or moved nearer to the front or sideline of any lot than the future width line of that street.

. Hillside Streets and Roads

- . Upon recommendation of the City Engineer, the City Council may designate smaller right-of-ways, travelled ways, and/or sidewalks where the Public Safety Element of the Rio Dell General Plan identifies areas of low or moderate slope stability.
- . The above could reduce the volume of cutting-and-filling connected with hillside streets and roads.

. General Plan Correlation

1. Land Use Element

Based on allowances permitted by the Land Use Element Map, the City street classification system would be as shown on Map C-3 and Chart 1.

Based on the Street Classification System, the Minimum right-of-way standards map (C-4) should be implemented when rezoning and subdivision applications are approved. This may be accomplished by requiring dedication of deficient rights-of-way, and appropriate improvements as a condition of approval.

Land Use Elements amendments occurring in the future should be examined in light of what impact the proposal might have on the circulation system.

2. Housing Element

Convenient access to housing, and a minimum volume of "through-traffic" on local residential streets are the basic housing-circulation concerns of municipal government.

The generation of traffic by housing and other land-uses should be considered when evaluating the function, capacity and needs of various city streets.

3. Noise Element

The Noise Element identifies noise from various transportation modes in the Rio Dell area.

The Noise Element noted that with the opening of the U.S. 101 Freeway, the City now has "the opportunity to redefine traffic and land-use relationships along Wildwood Avenue with the possibility of increased parking and creation of a more comfortable shopping environment."

4. Public Safety Element

The State-mandated Safety and Seismic Safety Elements were combined into a Public Safety Element in Rio Dell. The Public Safety Element includes specific recommendations that are hereby included by reference: 7, 14, 15, 16, 17, 18, 20, 21, 22, 23, 33, 34, 35, 38, 39, and 43.

5. Circulation and the Scenic Highway Element

The various proposals of the Scenic Highway Element are consistent with the Circulation Element:

Vista Point

Designations of a vista point and access road, as per recommendation Number 3 of the Scenic Highways Element has not yet occurred. When the specific designation is made, it could become an amendment to the Circulation and Scenic Highway Elements of the General Plan.

Community Enhancement

As per recommendation Number 5 of the Scenic Highways Element, the City should encourage the enhancement and beautification of City streets.

New Development

This enhancement and beautification effort should include developer provision of street trees and landscaping in new developments and all minor and major subdivisions. Another portion of the program involves landscaping, natural feature utilization, and planting of "street trees" in the public right-of-ways.

Downtown Beautification

Consistent with the revised function of Wildwood Avenue (old U.S. 101), "installation of attractive street lights, landscaping, street trees, benches, and even public restrooms should be considered as part of an effort to give the downtown area a distinctive identity and to encourage owners to improve the condition and appearance of their business properties."

6. Open Space and Conservation Element

Various portions of the Conservation and Open Space Element are consistent with the Circulation Element, and are included in this Element:

Goals and Objectives

"All public and private facilities should be developed to high standards of design."

"Provide increased public access to, and recreational use of, the Eel River."

Open Space Principles

"A coordinated system of trails for pedestrians, bikes and horses should be developed."

"Open space should be extended along, under, or over major transportation facilities serving Rio Dell."

Capital Improvements Programming and Budgeting

1. Need

The need to maximize the quantity and quality of City streets (the essential core of a circulation system) can best be met by an efficient utilization of resources. The procedure mandated by the State is best known as a "Capital Improvements Program," or CIP Budget. The mandate for CIP's is detailed by Sections 65401 and 65402 of the Government Code (contained in Appendix D).

2. Policy

a. Starting a Capital Improvements Program

1. The City Council will receive nominations for (public works) projects to be included in the Rio Dell Capital Improvements Program Budget (CIP). Nominations will come from the City Administrator, Public Works Director, and City Engineer, and any other person or group requested to do so by the City Council.

2. The nominated projects, their associated costs, justifications, and potential sources of funding will be evaluated by the City Council with the assistance of staff.

This Council-staff evaluation will assist the City Council to rank projects by priority, and availability of funding.

3. The staff will utilize the priority ranking of projects to compile a program for funding and implementing (the highest priority) projects during the next six years. The Capital Improvement Program Budget includes the current or up-coming fiscal year, and reflects the funding source for each proposed project (gas tax, general fund, general revenue sharing, grants, loans, etc.).

After completion, the tentative CIP is forwarded to the Planning Commission. The Commission reviews the tentative CIP for consistency with the General Plan.

The Commission's non-binding recommendations must be submitted to the City Council within 40 days of referral.

b. Continuing a Capital Improvement Program

1. Every spring the City staff should prepare a list of needed capital projects that were not included in the current CIP. The supplemental list should be accompanied by the information necessary for thorough Council review.

2. The Council should review this material, and direct that a new capital improvements program reflect changing priorities, needs, and funding opportunities that occurred during the current fiscal year. As before, the (new) capital improvements program budget will involve specific line-items for inclusion in the upcoming fiscal year, with stipulated sources of funding, and will give perspective to priority projects that are scheduled for the five years following the upcoming fiscal year.

3. The "rolling" nature of the CIP development (annually adding an additional year to the program) will assure perspective and assist in utilizing grant opportunities that arise unexpectedly.

STANDARDS BY MODE

1. Rail. The Rail routing, service level, and land use interface policies of the City of Rio Dell are found in the Regional Transportation Plan of the Humboldt County Association of Governments (HCAOG), as amended, unless otherwise noted.

2. Air. The Air routing and service level policies of the City of Rio Dell are found in the HCAOG Regional Transportation Plan as amended, unless otherwise noted at a later date by City Council Resolution.

3. Transit. The City of Rio Dell is a participating partner in the Humboldt Transit Authority. The Authority, formed by a joint powers agreement, will be the vehicle for providing regional transit service to the Residents of the Rio Dell area. Greyhound Buslines also provides long-haul transportation in and out of the region.

4. Non Motorized.

a. Bicycle

Specific bicycle standards addressed in Rio Dell's needs and situation should be developed in

the future. This could be as part of a bicycle plan prepared by the Association of Governments or the City.

b. Sidewalks

Sidewalks shall be constructed throughout the City, with the manner, timing, and financing as provided by a future Council Resolution, or City Sidewalk Ordinance. The basic width and thickness standards shall be as found in point 2 of the Subdivision Street Standards section below.

5. Subdivision Street Standards*

a. CURBS AND GUTTERS. Integral Portland Cement Concrete (PCC) curbs and gutters shall be required throughout. Vertical curbs, 6" in height shall be used. The curb height may be increased to 8" where approved by the engineer for drainage conditions. Gutters shall be at least 18" in width. Tops of opposite curbs shall preferably be level at any station outside the intersection proper.

b. SIDEWALKS. PCC sidewalks shall be required throughout with the following minimum dimensions.

Thickness	3-5/8"	Width	
		Arterial	6'
		Collector	5'
		Minor & Cul-de-sac	4'6"
(Width dimension does not include top of curb section)			

* Source: "Street Standards Guide for California Cities," League of California Cities, 1967, pp. 15-16.

STREET CLASSIFICATIONS (Sheet 1)

CHARACTERISTIC Type	BASIC Functions		Planned Service			
	Traffic Movement	Land Access	Area Served (linkage)	Trip Length	Speed	Parking
Local Street	Incidental	Basic	Individual Properties	Under 1/2 mile	Under 25	Permitte
Collector Street	Partial	Partial	Neighborhood	Under 1 mile	25-30	Permitte
Arterial Street	Primary	Secondary	Community	Over 1 mile	30-45	Limited
Freeway	Sole	Controlled	Region & State	Over 3 miles	45-55+	None

* Assuming conditions permit.

STREET CLASSIFICATION (Sheet 2)

CHARACTERISTIC Type	Planning Criteria						Funding Responsibility
	Average Daily Traffic	Hourly Design Volume	No. of Lanes	Travelled Way	Parking Lanes	Sidewalks	Right-of- Way
Local Street	Under 1,000	Under 100	2	20'	2 - * 8' lanes	4' 6" ***	50 ***
Collector Street	1,000- 5,000	100- 500	2-4	24'+	2 - * 8' lanes	5' **	60
Arterial Street	5,000- 10,000	500- 1,000	2-6	36-48	2 - * 8' lanes	6' **	80
Freeway	10,000+	1,000+	4 or more	48+	None	None	84-110+

* Parking lanes on industrial streets: 12' desired width, 10' minimum width.

** To be installed within the right-of-way, unless a R/W is substandard (then sidewalks on private prop

*** Unless curb-section and sidewalk on private property, then 40' R/W.

5. SUBDIVISION STREET STANDARDS (cont.)

c. DRIVEWAYS. PCC driveways shall be required throughout with the following minimum and maximum dimensions.

<u>Minimum</u>	<u>Maximum</u>
Thickness 5 1/2"	Width 35'
Width 10'	

(Width dimension does not include curb taper)

d. STREET LIGHTS. Street lights shall be required in all subdivisions.

e. STREET NAME SIGNS. Street name and traffic control signs shall be installed to the standard of the City of Rio Dell at the subdivider's expense.

f. STREET TREES. Street trees may be required at the subdivider's expense, at the discretion of the Planning Commission and City Council.

g. UTILITIES.

1) Installation. All underground utility installations under roadways shall be completed prior to the paving of the roadway.

2) Easements. Utility easements shall be provided by the subdivider as required by the local public agency.

h. STREET ALIGNMENT.

1) Intersection Angle. All streets shall intersect at right angles and shall have at least 50 feet of centerline tangent adjacent to the intersection. The intersection angle may be reduced provided approval is granted by the City Engineer, but in no case shall the angle be less than 60°.

2) Opposing Streets. All streets entering upon any street shall have their centerline directly opposite each other or separated by at least 125 feet on minor and cul-de-sac streets and 300 feet on all other streets.

i. SURVEY MONUMENTS. Permanent survey monuments shall be installed by the subdivider to the standards of the City of Rio Dell. An affidavit shall be filed by the subdivision engineer/surveyor certifying that all required monuments have been installed prior to final acceptance of the subdivision improvements.

1) Street Monuments. Street monuments shall be set to reference street centerlines at intersection curves and tract boundaries. Monuments shall not be more than 500 feet along monument lines and shall be shown on the final subdivision map or parcel map.

5. SUBDIVISION STREET STANDARDS (cont.)

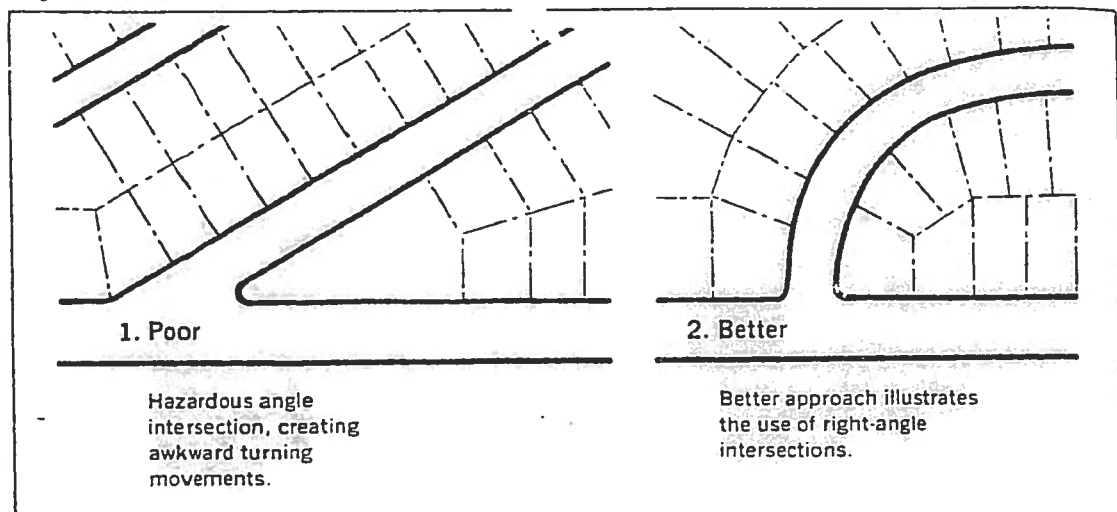
2) Lot Monuments. Lot monuments shall be set at all lot corners and angle points marking the extremities of each lot in the subdivision. In case a physical barrier prevents setting the monument on the true corner, a witness monument shall be set at a definite distance from the true corner and the location of the witness corners shall be noted on the final subdivision map.

j. DRAINAGE REQUIREMENTS

1) Design. Drainage facilities, designed in accordance with accepted engineering principles and located in public streets or easements, shall be provided to care for drainage. Drainage facilities and design criteria shall be approved by the City Engineer. Upstream area shall be considered as if fully developed. Downstream facilities shall be adequate to accommodate the design flow.

2) Watercourses. Artificial and natural watercourses shall be placed in closed conduits where the flow requires a 48-inch concrete pipe or less. All permitted open ditches and channels shall be fenced with chain link fence and lined with concrete. Design of access, bottom width, and shoulder width shall be such that the drainage facility may be adequately and efficiently maintained.

k. HILLSIDE SUBDIVISIONS. Where terrain precludes use of these standards, the City of Rio Dell will adopt practical modifications upon advice and recommendation of the City Engineer.

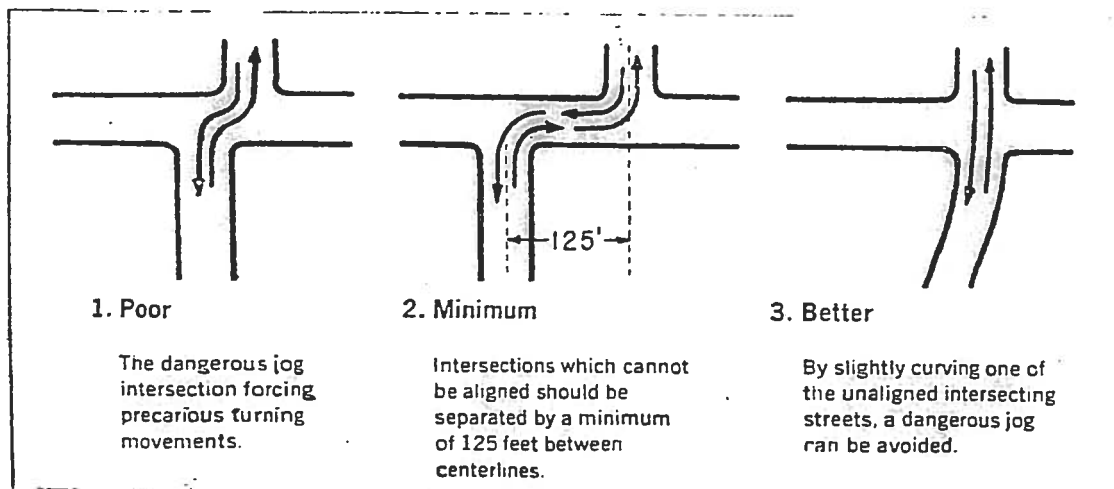


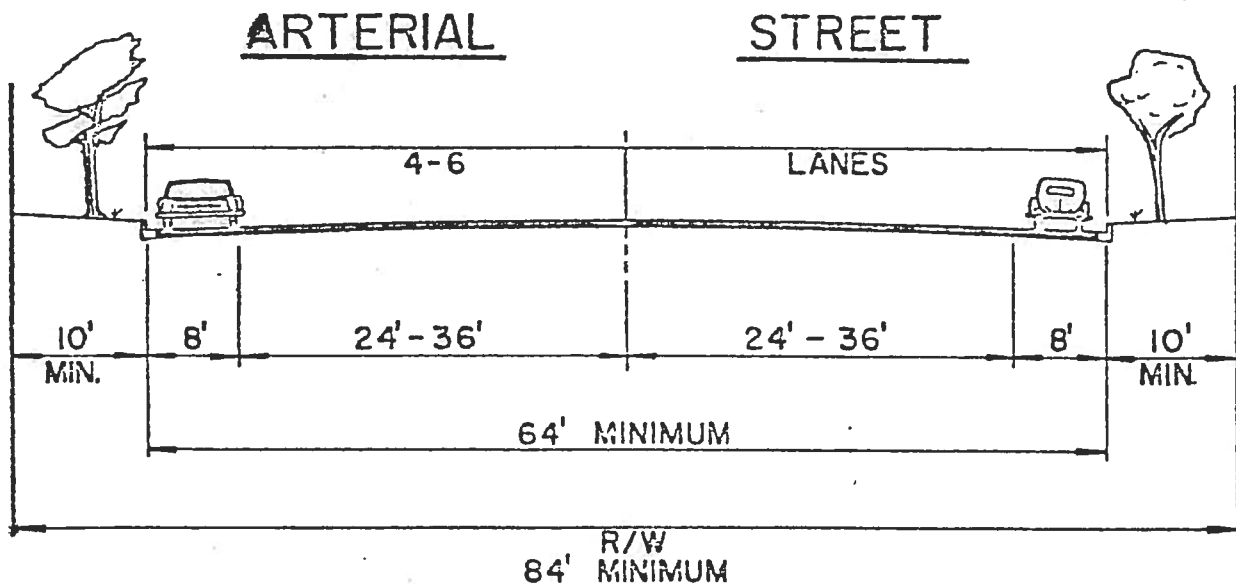
6. Right of Way Standards

The following widths are considered to be the desirable minimum in each instance.

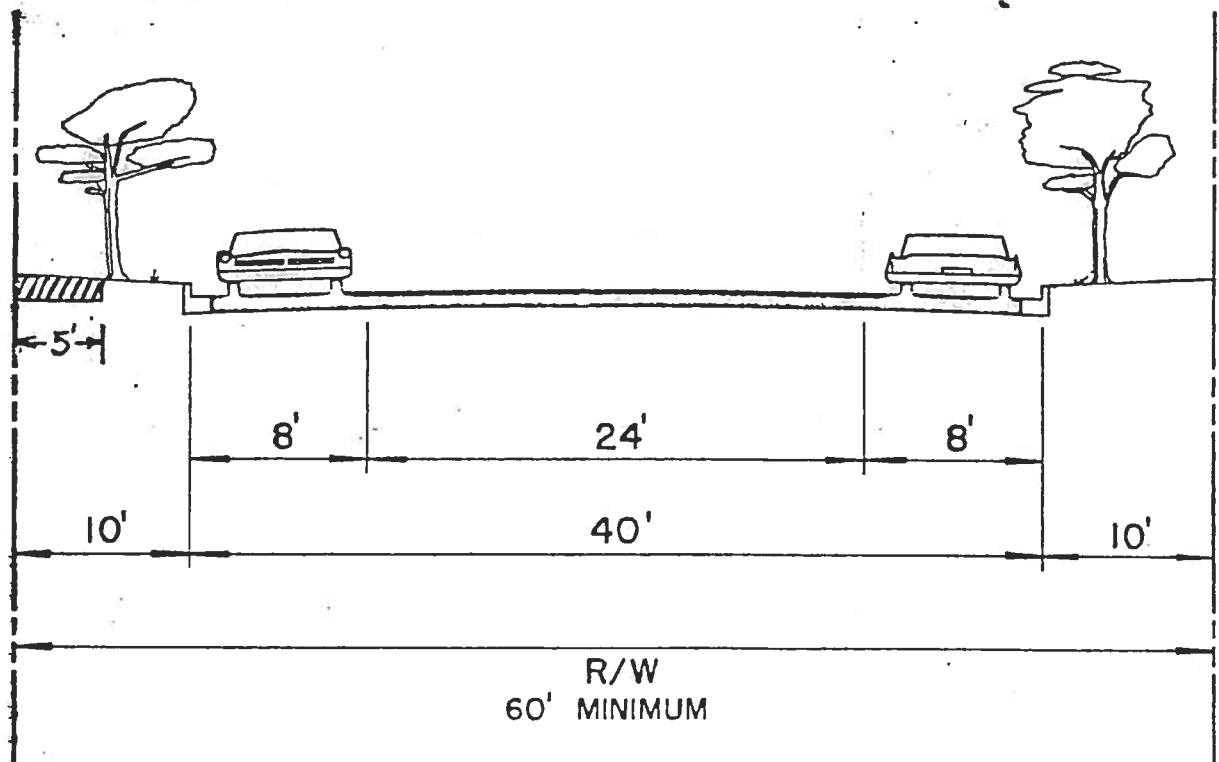
ITEM	MINIMUM WIDTH	STREET CLASSIFICATION
Moving Lane	12 feet	Freeway, arterial, collector & industrial
	10 feet	Minor, cul-de-sac, alley
Shoulder or parking lane	10 feet	Industrial
	8 feet	All others
Curb Lane	2 feet increase to curbface	All streets (except alley) in lieu of shoulder or parking lane
Right-of-way line to curb face or shoulder	10 feet	All streets (except alleys and industrial)
Curve <u>radius</u> for turn around	40 feet	Cul-de-sac
Maximum length from intersecting street to center of turn-around	500 feet	Cul-de-sac

Source: "Street Standards Guide for California Cities,"
League of California Cities, 1967, pg. 4

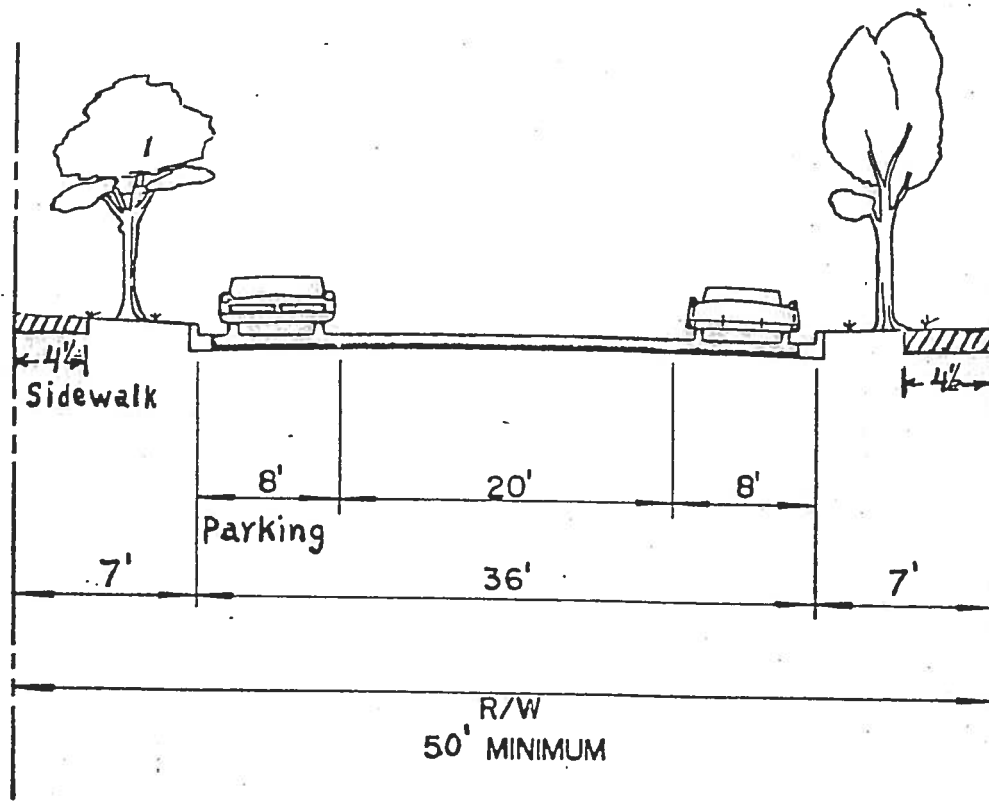




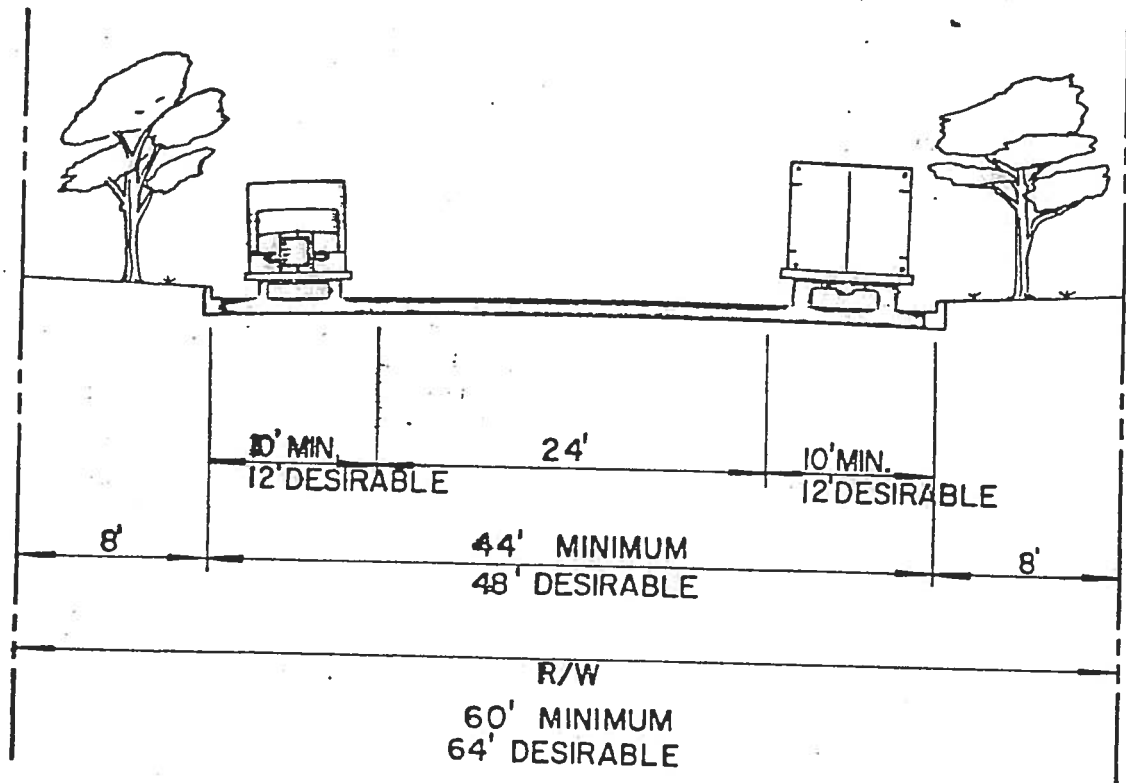
COLLECTOR STREET



MINOR STREET



INDUSTRIAL STREET



GENERAL GUIDE ON TRIP END GENERATION RATES BY LAND USE

TYPE OF LAND USE	TYPE OF DEVELOPMENT	NO. OF STUDIES	WEEKDAY TRIP END GENERATION RATES	
			AVERAGE*	RANGE
RESIDENTIAL	Subdivision	20	9.5 TE per Occupied Dwelling Unit	6.4 - 12.7
	Apartment	16	5.8 TE per Occupied Dwelling Unit	3.1 - 7.9
	Mobile Home Park	17	5.4 TE per Occupied Dwelling Unit	2.8 - 6.8
	Retirement Community	5	3.3 TE per Occupied Dwelling Unit	2.9 - 4.9
MAJOR INSTITUTION	College (4 yrs.)	5	2.2 TE per Student	1.9 - 2.7
	College (2 yrs.)	4	1.3 TE per Student	1.1 - 1.6
	High School	5	1.3 TE per Student	1.1 - 2.1
	Grammar School	1	0.7 TE per Student	—
	Hospital	8	9.4 TE per Bed	4.5 - 14.9
	Library	3	49.8 TE per Employee	37 - 82
	Government Office Bldg.	4	440 TE per 10,000 sq. ft. floor area	250 - 1391
COMMERCIAL	Shopping Center (regional)	4	315 TE per Net Acre	149 - 671
	Shopping Center (neighborhood)	1	1000 TE per Net Acre	—
	Commercial Office Bldg.	5	125 TE per 10,000 sq. ft. floor area	94 - 166
	Medical Office	4	41 TE per Doctor	31 - 53
	Motel	10	10.1 TE per Occupied Unit	4.7 - 14.6
	Restaurant	4	499 TE per 10,000 sq. ft. floor area	311 - 734
INDUSTRIAL	Various types of Industry	27	79 TE per Net Acre	9 - 350
	Industrial Park	3	77 TE per Net Acre	66 - 140
	Warehouse	9	81 TE per Net Acre	28 - 256
	Mass Production	8	93 TE per Net Acre	38 - 191
	Administration	8	60 TE per Net Acre	28 - 229
	Research and Development	8	58 TE per Net Acre	31 - 127
	Specialty Production	7	39 TE per Net Acre	9 - 159
	Truck Terminals	4	56 TE per Net Acre	43 - 128
RECREATIONAL	Picnicking	25	0.8 TE per Total Acre	0.1 - 35
	Winery with Tasting Room	1	11.0 TE per Employee	—
	Golf Course (18-hole)	6	6.4 TE per Acre	2.5 - 10.9
			816 TE per Golf Course	237 - 1524
	Golf Course (9-hole)	1	176 TE per Golf Course	—
	Bowling Lane	1	33 TE per Lane	—
	Marina	3	4.8 TE per Berth	3.2 - 10.0
	Ocean Beaches	12	44 TE per 1000 ft. of Beach	8.0 - 345
	Swimming	6	7.4 TE per Total Acre	1.7 - 20
	Hiking Trails	17	0.5 TE per Total Acre	0.1 - 10.3
AIRPORT	Overnight Camping	9	0.3 TE per Total Acre	0.1 - 12.2
	General Aviation	7	9.5 TE per Based Aircraft	2.4 - 20.1

SOURCE: California Dept. of Transportation, District 4 Trip Ends Generation Research Counts.
Except for Fresno State College, all studies were taken within the San Francisco Bay Area.

*NOTES: Average rates are weighted from the total number of studies for each type of development with ranges shown.
They will be updated periodically as more studies are made. Average rate for developments with limited number of studies may be disproportionately plotted
M/J 4 1974

INFORMATION ONLY

Land Use/Housing/Circulation Data Core

Total Acreage*

Moderate Low Density

(Single Family Residential Land Use)
(2.0-6.0 dwelling units (d.u.) per gross acre)

<u>Net Acres</u>	<u>Dwelling Units (at 2.75/net acre)</u>	<u>Average Trip Ends (ATE)</u>		
		<u>Low</u>	<u>Average</u>	<u>High</u>
3.5	9.6	61.6	91.4	122.2
46.0	127.0	816.0	1211.3	1619.3
5.5	15.1	96.8	143.7	192.0
22.5	61.9	396.0	587.8	785.8
4.7	12.9	82.7	122.8	164.1
21.0	57.8	369.6	548.6	733.4
9.6	26.4	169.0	250.8	335.3
5.8	16.0	102.0	151.5	202.6
15.6	42.9	274.6	407.6	544.8
6.1	16.8	107.4	159.4	213.0
3.2	8.8	56.3	83.6	111.8
1.6	7.0	45.1	46.9	89.4
4.2	11.6	73.9	110.2	147.3
14.3	39.3	251.7	373.6	499.4
7.4	20.4	103.2	193.3	258.4
13.6	37.4	239.4	355.3	475.0
7.8	21.45	137.3	203.8	272.4
.7	1.9	12.3	18.3	24.4
16.0	44.0	281.6	418.0	558.8
15.5	42.6	272.8	404.9	541.3
2.3	6.3	40.5	60.1	80.3
2.2	6.1	38.7	57.5	76.8
1.9	5.2	33.4	49.6	66.4
231.0	638.45	4061.9	6050.0	8114.2

* Data on these pages generated by Student Intern David Anderson

Land Use/Housing/Circulation Data Core (cont.)

Medium Denisty

(Multi-Family Residential Land Use)
(5-15 d.u. per gross acre)

Group	Net Area	Low		Medium		High	
	Grouping Acres	D.U. 5 @ net acre	ATE 9.5/d.u.	D.U. 10/A	ATE 5.8/d.u.	D.U. 15/A	ATE 5.8/d
	11.4	57	542	114	66	171	992
	5.9	29	275	59	360	88	510
	1.2	6	57	12	70	18	104
(AA)	6.9	34	323	69	400	103	597
	.46	2	19	4	27	6	35
	2.75	13	124	27	160	41	238
	.62	3	29	6	36	9	52
	1.56	7	67	15	90	23	133
	1.53	7	67	15	89	23	133
	1.69	8	76	16	98	25	145
	1.68	8	76	16	97	25	145
	6.19	31	295	62	360	92	537
(AB)	4.2	21	200	42	243	63	365
	.6	3	29	6	35	9	52
(AC)	4.5	22	209	45	361	69	400
(AD)	4.78	24	228	48	278	71	412
	1.38	7	67	14	81	20	116
(AE)	4.85	24	228	48	281	72	410
	1.5	7	67	15	87	22	128
	2.8	14	134	28	138	42	244
	2.0	10	95	20	116	30	174
	.58	3	29	5	34	8	46
	0.67	3	29	6	39	10	58
	3.73	18	174	37	216	56	325
TOTAL	73.5	361	3,439	729	4,357	1,096	6,269

Land Use/Housing/Circulation Data Core (cont.)

High Density

(Multiple-family Residential Land Use)
(15-29 D.U. per gross acre)

Net Area	Low		Medium		High	
	D.U. 15 @ net acre	ATE 5.8/D.U.	D.U. 22/A	ATE 5.8/D.U.	D.U. 29/A	ATE 5.8/D
.6	9.0	52.2	13.2	76.6	17.4	100
1.9	28.5	165.3	41.8	242.4	55.1	319
.23	3.45	20.0	5.1	29.3	6.7	38
10.6	159.0	922.2	233.2	1352.6	307.4	1782
2.65*	39.8	214.9*	58.3**	338.1	76.8**	445
1.56*	23.4	126.4*	34.3**	198.9	45.2**	262
2.8	42.0	243.6	61.6	357.3	81.2	480
5.9	88.5	513.3	129.8	752.8	171.1	992
3.4	51.0	295.8	74.8	433.8	98.6	571
29.63	444.65	2,553.7	652.1	3781.8	859.5	4993

* Mobile Homes - 5.4 ATE/D.U.

** Apartments at these higher densities.

Appendix D
Mandated Capital Improvement Programming

Section 65401. Recommendation of Proposed Public Works;
Coordination of Program

If a general plan or part thereof has been adopted, within such time as may be fixed by the legislative body, each county or city officer, department, board, or commission, and each governmental body, commission, or board, including the governing body of any special district or school district, whose jurisdiction lies wholly or partially within the county or city, whose functions include recommending, preparing plans for, or constructing, major public works, shall submit to the official agency, as designated by the respective county board of supervisors or city council, a list of the proposed public works recommended for planning, initiation or construction during the ensuing fiscal year. The official agency receiving the list of proposed public works shall list and classify all such recommendations and shall prepare a coordinated program of proposed public works for the ensuing fiscal year. Such coordinated program shall be submitted to the county or city planning agency for review and report to said official agency as to conformity with the adopted general plan or part thereof.

Section 65402. Acquisition or Disposition of Property;
Construction of Buildings; Requirements
Before Action

(a) If a general plan or part thereof has been adopted, no real property shall be acquired by dedication or otherwise for street, square, park or other public purposes, and no real property shall be disposed of, no street shall be vacated or abandoned, and no public building or structure shall be constructed or authorized, if the adopted general plan or part thereof applies thereto, until the location, purpose and extent of such acquisition or disposition, such street vacation or abandonment, or such public building or structure have been submitted to and reported upon by the planning agency as to conformity with said adopted general plan or part thereof.

Land Use/Housing/Circulation Data Core (cont.)

Commercial Land Use

Net Area

.74
1.2
5.49
9.2
TOTAL 16.63

Available Formulas do not readily apply to Rio Dell.

Freeway Commercial

Net Area

19.30
.91
8.3
.57
1.15
.82
TOTAL 30.85

Since Freeway Commercial land uses are adjacent to the Davis Street interchange, this traffic will generally remain adjacent to the on- and off-ramps.

Industrial Land Use

Acres	ATE		
	Low (56/A)	Medium (66.5/A)	High (56/A)
6.7*	375.2	445.6	513
6.7	375.2	445.6	513
TOTAL 12.14	750.4	890.12	1026

NOTE:
Industrial
ATE = 77/A
Truck Term.
ATE = 56/A
The 66.5 A'
figure is :
average.

* Too big includes some R/W

Public/Semi-Public

Net Area	Use	ATE
1.15	Church	
.48	Church	
.3	Church	
4.55	Fire Dept./Old City Hall	
19.9	Elementary School	
2.6	Sewage Plant	
1.6	Police Dept./City Hall	
.14	American Legion	
.28	Church	
TOTAL 31.00 Ac.		

